

of the book. Perhaps it should have been, *Attempts at . . .*. The authors are to be credited with frankly stating that the efforts have not been effective in restoring the prior condition of the lakes, as the simulation models predicted they would not. No measures other than P reduction seem to have been considered. The change of pH of the waters, originally acid, now quite alkaline, doesn't seem to have been considered as possibly contributing to the changes in biota, and especially the change from clear water with macrophytes, to opaque water with algal dominance.

The AMOEBE graphical presentation of the state of the environment provides a convenient method of displaying the current state of the lake's many variables simultaneously comparing them to the goal. Thus even the non-limnologist can see what variables need to be reduced (such as P, chlorophyll, cadmium) and which increased (pike, zebra mussels, green algae and transparency).

This book has been reprinted from *Hydrobiologica*, vol. 233. This book is a valuable addition to a limnologists reference collection, and an excellent text for advanced limnology courses. Apart from those who have its contents from *Hydrobiologica*, it should be in every major limnologist's library. More than merely recapping a specific project that had limited success, the book serves as a precautionary tale that pollution may be cheaper to prevent than to undo.

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### Geology of Bangladesh

K.U. Reimann, 1993. *Geology of Bangladesh* with a contribution by K. Hiller. Gebruder Borntraeger, Stuttgart, VIII + 160 pp. Price: DM 124.00. ISBN 3-443-11020-7.

This book consisting of 6 Chapters, is a result of cooperation between the German Geological Advisory Group (GGAG) and the Bangladesh Oil, Gas and Mineral Corporation (BOGMC).

This publication fills a considerable gap in the geological literature of Bangladesh. It is good to see well documented results in the form of a book coming out of an international assistance program. The results of such combined efforts of the organizations would receive wider audience and would be useful for other researchers interested in the region. The author should be congratulated for the efforts in bringing out this book.

The book is concise (160 pages with 46 Figs. and 5 tables) and informative. In Chapter 1, a general introduction is given which includes the population and climatic conditions of Bangladesh. Chapter 2, deals with regional geology. Considering the small size of the Bangladesh, more information should have been added in this chapter without limiting the information to the country's borders. As such the geology of a region cannot be restricted to the political boundaries and a more informative figure (Fig. 13) would have given a detailed impression of the region's geological setting. In Chapter 3, the stratigraphy of the region is described in detail, particularly interesting is the compilation of the stratigraphic chart of the Bengal Basin (Fig. 17) and the lithology and stratigraphic information provided based on the drill well data (Figs. 18 and 19). In this chapter the author brings out a case of misapplication of nomenclature, citing the example of the Tipam group and Tipam sandstone formations in Bengal Basin. These rock units belong to Pliocene and not to the Miocene as in the case of upper Assam units. In Chapter 4, a brief review of the structural geological aspects are presented which are divided into Carboniferous–Permian epeirogenic phase, Late Jurassic/Early Cretaceous break-up of Gondwanaland, Phase of passive continental margin tectonics, Phase of subduction, plate collision and young orogenic deformation. The authors are limited by the data obtained from few drill wells. The structural development of the Precambrian basement of the Bangladesh remains to be worked out. The sections given in Figs. 33 and 34 are informative. The Chapter 5, titled as "Paleogeography" deals with the tectonics and depositional environments during, Pre-rift stage, Rift stage, Drift and continental platform

stage, Rift stage, Drift and continental platform stage and Neogene delta stage. The rift stage related to mass bending and breakup of the continental crust, subsequent to the breaking away from East Gondwanaland. A minor part of the Rajmahal traps are encountered in the well on the foreland shelf of Bangladesh. The interesting phase during this period is the periodic volcanic inactivity marked by intercalation of sedimentary beds. Chapters 4 and 5, which deal mainly with tectonic setting, should have been clubbed under a more appropriate title, such as “Tectonic setting and depositional environment”. Chapter 6, titled as “Raw materials”, is partly (Hydrocarbons) contributed by Dr. K. Hiller, it is divided into Energy raw materials, Metallic raw materials, Non-metallic raw materials, Ground water and Soils. Appropriately a major portion of the chapter is devoted to the Hydrocarbon resources. This aspect was discussed in detail with considerable new information primarily obtained from drill wells (Tables 1 and 2, Figs. 38, 40 and 41) and seismic studies. Inclusion of representative multichannel seismic sections would have increased the value of this chapter.

There are few spelling mistakes, use of compound words (p. 94, printed as Himalajan instead of Himalayan; p. 23 printed as Mezoic instead of Mesozoic, Petroleumgeological, p. 99 and 101) and a missing reference (Murthy et al., 1968 referred on p. 18). Nevertheless, the book is well set with impressive fold-outs and informative tables. The reference list provided at the end is comprehensive. The book will be useful to researchers and students dealing with the geology of Bangladesh.

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### Palaeontology

Robert L. Carroll, 1993. *Paläontologie und Evolution der Wirbeltiere*. Georg Thieme Verlag Stuttgart, Stuttgart, IX + 684 pp. Price: DM 168.00. ISBN 3-13-774401-6, hard bound.

With this translation of Carroll's (1988) original *Vertebrate Palaeontology and Evolution* into

German, a new textbook on this subject has become available to the German-speaking public. The translation may reflect the increased interest in vertebrate palaeontology and evolution in Germany in the last few years. That this interest is not shared by scientists only may be the rationale behind the translation project because it would be quite unprofitable to put such a rather expensive book (168.00 DM) on the market for professionals only (who read English anyway).

The translators are mainly German palaeontologists (W. v. Koenigswald, T. Martin, H.U. Pfretzschner, P.M. Sander, F. Schrenk and D. Thies) who are involved in various aspects of research on fossil vertebrates. In addition, two zoologists (M. S. Fischer and W. Maier) took over the task. The numbering and the topics of the chapters are the same as in the English edition of Carroll's book. Every chapter was translated by one or occasionally two authors so that a loss in consistency is kept to a minimum. Furthermore, D. Thies has not restricted himself to translating, but offers revised versions for the first eight (of 22) chapters. For example, he inserted the results of Reif's (1973) work on the enameloid structure of elasmobranchs and their implications for neoselachian interrelationships (p. 79) which Carroll (1988) omitted.

Of the remaining chapters, nearly every one has been updated with respect to important scientific works that were published since Carroll's first edition. The number of illustrations has been increased so that we can now count 710 Figs. (as opposed to 682 in the original English edition). Finally, a rich appendix listing the known fossil vertebrate taxa down to the generic level completes the volume.

These are the major advantages of this book, which thus represents a quite good general overview of our knowledge about phylogeny and skeletal anatomy of the vertebrates. Although *Paläontologie und Evolution der Wirbeltiere* is clearly one of the most comprehensive textbooks (if not the best of all) to date, it surely is not the ultimate. With the many mistakes in the text, dubious interpretations and omissions of important conclusions, it seems the authors restricted themselves too much to transforming the English text into German without being aware of the