
Veterinary Pathology in the Tropics – For Students and Practitioners. Gerald Munene Mugera. New Age International (P) Ltd, 4835/24, Ansari Road, Daryaganj, New Delhi 110 002. 2000. 406 pp. Price. Rs 395.

Veterinary pathology is an important subject in veterinary science as it provides an insight into the mechanism of tissue changes and a descriptive account of the lesions encountered in diseases which will help in the diagnosis of diseases. The book, is therefore, a welcome addition to the list of books available in veterinary pathology. The author with his vast experience as a teacher, provides very useful essential information on the pathology of domestic animals in a capsule-form. It serves as a good guide for the teacher, student and the veterinary practitioner. The book will be very useful for undergraduate students. The entire information has been presented in 20 chapters. Most of the textbooks available in veterinary pathology are very descriptive and voluminous. This book, which presents the relevant information in a lecture-note form, will be received well by undergraduate students.

The basic concepts in veterinary pathology have been well defined for students to grasp them easily. The definitions for various terminologies used are very crisp, without any ambiguity. The chapter on inflammation which is the basis of pathology has been documented well and the student will get a clear idea on the inflammatory process. An ultra structural description of the cells involved in inflammation would have been very useful. Focus has been made on neoplasia and a brief account of the causative factors has been furnished. Individual tumours have been described under each system. A brief, but very useful information has been provided under each system, particularly under the endocrine, respiratory, cardiovascular and genito-urinary systems. The descriptions supported by selected black-and-white photographs will help to recognize the lesions in various diseases. Veterinarians working in the field will find the book very handy for quick reference.

Although the title of the book is 'Veterinary Pathology in the Tropics', information on specific diseases has not

been included. A little more information could have been provided on phagocytosis, etiology of neoplasmas, concepts of oncogenesis and immunopathology. It is good that references have been provided under each chapter. The students will find them very useful for detailed studies. However, care could have been taken to exclude very old references which may not have any relevance now. A few spelling mistakes and omissions in citing references could be corrected in the next edition. Indexing will be helpful.

The author has taken pains to provide all essential information in a nutshell. His efforts to help undergraduate students by providing all essential information in veterinary pathology is commendable. The book can certainly find a place in libraries in veterinary colleges and veterinary hospitals. The book has a good format and the price is reasonable.

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Quaternary Sea-Level Variation, Shoreline Displacement and Coastal Environment. G. Victor Rajamanickam and Michael J. Tooley (eds). New Academic Publishers, F-22B/3, Laxmi Nagar, Delhi 110 092. 2001. 260 pp. Price: Rs 3000/US \$200/£125.

The edited volume is the outcome of an International Seminar held under the aegis of INQUA (The International Union for Quaternary Research) Commission on Quaternary Shorelines – Indian Ocean Sub-commission. The sea-level fluctuation is a fascinating field and significant researches have been carried out relating to rise and fall of sea-level in the geological past. The earth's surface has passed through a stage of no water (at the time of its birth) to the present stage of being covered by about 70% of the area. Study of sea-level variation in the geological past gained importance because of exploration for hydrocarbons. Majority of the oil and gas fields occur in areas which have

been continental shelves either in the past or at present.

The records available so far indicate increase in sea-level in steps and each step is characterized by a gradual rise followed by a steep fall. The sea-level reached a maximum during the Cretaceous period (140 to 65 Ma ago), when it was about +200 m, with reference to the present level. The sea-level fluctuations have been more rapid during Quaternary, which is related to the glacial and interglacial periods. Significant lowering of the sea-level occurred about 15,000 years ago, when the sea-level stood at –100 m. There was an accelerated sea-level rise between 15,000 and 6000 years B.P. when the sea reached the present level. The rate of sea-level rise during this period was remarkably high (~ 1 cm/yr). Between 6000 years B.P. and about 100 years B.P. there was no significant change. But then onwards, there is a slow rise in sea-level (about 1 mm/yr). This is attributed to anthropogenic causes like burning of fossil fuels, discharge of other greenhouse gases, which have contributed to an average rise of global temperature by 0.5°C between 1860 and 2000. The rise in temperature has contributed in two ways to sea-level rise: melting of glaciers and thermal expansion of sea water. It is this rising trend at present that is alarming, as a major part of the world population lives close to the shoreline and other low-lying areas. For this reason, knowledge of sea-level fluctuation during Quaternary (beginning of which marks the appearance of *Homo sapiens*) becomes important.

The title of the volume, the general presentation and names of the editors arouse a lot of expectations. With Michael J. Tooley, Professor at the Kingston University, UK as one of the editors, one would naturally expect the language to be close to Queen's English. Anyone who goes through the volume from this point of view is bound to be disappointed. This is because, constructions of sentences, spellings, punctuations, illustrations, captions, etc. have been treated with scant respect.

Presidential address, special address and valedictory address related to the seminar have been included. These addresses, although appropriate as speeches of the dignitaries during the respective functions, do not deserve to

be a part of the published volume as these contain ideas of general nature. The keynote address of M. J. Tooley is an exception and finds a place it rightly deserves.

There are 32 papers, which broadly cover the following topics: coastline changes, sea-levels, placer minerals, sediment dynamics and coastal environment. It would have been better if these papers were numbered serially and arranged theme-wise.

A review of coastal morphology and changes in the Bangladesh coast; impact of cyclonic storms on the West Bengal coast; shoreline changes in the Bengal basin; shoreline displacement in a part of West Bengal; changes in Hugli estuary; coastal changes in Kochi; changes in tidal basins in parts of Maharashtra; coastal changes in Mumbai are the topics of the papers dealing with coastal change. These papers portray both the contribution of the researchers themselves and a review of the available literature and hence form good reference material, particularly on the Bengal coast. The paper on Hugli estuary also deals with navigational problems and remedial measures.

Among the papers related to sea-level, the paper on Bengal basin deals with sea-level cycles during Oligocene, which is outside the purview of the vol-

ume. Another paper on sea-level rise in coastal 'Tamil Land' is based on accounts found in Tamil literature. The paper includes very elementary ideas; is full of inaccurate and incorrect statements, and makes vague interpretations from such data. Even the references have not been listed properly. This paper is not fit to be included in a scientific volume. The papers dealing with the sea-level changes along Gujarat, Konkan, Goa, Coromandel, Andhra and Bengal coasts draw appropriate conclusions based on the field observations. However, these papers do not provide an insight to the sea-level changes along the Indian coast, as some of these regions are tectonically active and what can be observed is only a relative sea-level change. There is one poorly written paper on sea-level changes in Visakhapatnam and Chennai based on tide gauge data. Another paper dealing with compression of tidal data is not relevant to the volume.

There are two papers dealing with the placer deposits. Both the papers, one on the east and another on the west coast respectively, emphasize the importance of coastline configuration in the concentration of heavy minerals. Related to this theme is a paper purely on the methods of exploration, which could have been avoided.

The next set of papers deal with marine sediments; otoliths off Saurashtra coast; suspended sediments concentration using satellite data; debris of marine organisms in sediments as sea-level indicators. Two papers deal with beach dynamics, of which one is related to changes in morphology during a tidal cycle of the beach in northern Karnataka and another is on the annual beach cycle in Palk Bay. There are a few papers dealing with environmental and engineering problems relating to the shore-based industries. A majority of them are not relevant to the theme. However, the paper on the use of isotopes for extracting information on palaeoenvironment is an exception.

In spite of the many shortcomings, an attempt to bring out a volume on Quaternary is welcome. Again, how many interested people can have access to this publication is a big question. The volume, which has an exorbitant price tag (Rs 3000), is beyond the reach of individuals and even some libraries.

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