

MORE ON WETLANDS AND LAKES

Kar, Devashish. 2013. *Wetlands and Lakes of the World*. xxxv + 687 pages. 316 illus., 273 illus. in color. Springer, Dordrecht, The Netherlands. ISBN: 978-81-322-1023-8 (hardcover). € 169.99

After I had examined a couple of Encyclopedias devoted to lakes and wetlands, this volume was received with interest mixed with an element of curiosity about its scope and approach especially because it is a herculean task for a single individual to even list these ecosystems from the entire world. The description of the book on the publisher's website caused some confusion. It says, "The occurrence and description of wetlands in India with reference to those around the world is detailed in a sequential manner from local, provincial, regional, and national to global scenario". Then, it adds that "As Limnology and Fishery Science are interlinked, this book attempts to provide a holistic view of both the fields, along with their methodologies". Further, "the book also deals with a systematic, sequential and comprehensive treatment of the Limnology (physico-chemical and biological features) and Fisheries of the wetlands in India"; "it deals with the protocols of various Limno-logical methodologies" and "is a humble treatise to provide the undergraduates with a text concentrating on the common, fundamental features of all aquatic systems, and for the postgraduates, researchers, policy makers, administrators, etc. with the details of processes and applications with examples". It became clear to me that the author had no clear focus on the scope or the target readership.

As I browsed the contents and started reading the book, I got more confused about my own understanding of limnology, lakes and wetlands. The author does not take a clear position on the definition of limnology or wetlands except referring to the restricted and extended usage. This issue could be ignored if the author had not included oceans within the scope of limnology (p. 2). However, under the section 'Other Terminologies' the author abruptly switches to wetlands with an example from Sharavathi river basin in Karnataka. I discovered to my surprise that the entire para (p. 2-3) had been lifted verbatim from the Introduction of a publication by TV Ramachandra and Sreekantha (http://wgbis.ces.iisc.ernet.in/energy/water/paper/con_Wetlands/Wetlands_index.pdf).

Browsing a little further, I struggled to find why Malaysia was selected by the author to describe an example of limnological studies in a developing country instead of describing the science in India which he restricts to listing of a large number of references picked up randomly from an earlier review. I could again lay my hands on the source without effort but to my dismay that the text of the entire section 1.10 (p. 7-16) is copied verbatim from Ho (1995). Next nine chapters deal with lentic systems though the term is replaced by 'lakes' after describing the physico-chemical characteristics of 'lentic water' and 'lentic soil'. These chapters focus mainly on the laboratory methods for analysing a few parameters in water and soil instead of describing the variability across the range of lakes in the world. Only temperature, turbidity, transparency, pH, DO, free CO₂, alkalinity and conductivity are covered in case of water and in case of soils the parameters include temperature, texture, colour, moisture content,

bulk density, conductivity, organic carbon, available P and K. Major nutrients in water have been ignored. The other chapters describes the lake classification, origin and evolution, lake hydrology, and lake biota (aquatic macrophytes, other organisms, and strategies for survival of aquatic organisms). A chapter inserted in between describes numerous lakes from different parts of the world. The descriptions and photographs have been copied from various sources - many available directly on the worldwide web. While material on Wikipedia may not be copyrighted, the author has ignored the copyright notice on the web and lifted material almost verbatim for the Section '6.9.2.1 The Highest Lakes in the World' (p. 120-126) from <http://www.highestlake.com/highest-lake-world.html> (copyright 2002 by Carl Drews).

Despite having come across such large scale blatant plagiarism, I moved to the chapters on wetlands - an area of special interest to me. The book devotes 400 pages (about 60% of the total) in 16 chapters to cover a very wide range of topics from history, definition, origin, evolution, biogeochemistry, hydrology, biota (flora, plankton, fauna and fishes), bio-logical adaptations, ecosystem development and classification. Innumerable wetlands from all continents of the world are described in seven chapters of which one is devoted to India. Habitat mapping of the wetlands using remote sensing and GIS is discussed in another chapter. Reading the chapters could easily bring out large variation in the style, language and content of different sections and often within a section. It became evident that the material has been taken from different sources but I am astonished that pages after pages have been copied verbatim from the well known book on Wetlands by Mitsch and Gosselink (2007); for example, p. 192-196 on definition of wetlands, p. 259-261 on ecosystem development, chapter 15 (p. 215-219) on wetland hydrology and so on. Changing a word from 'major' to 'principal' or leaving out a sentence does not absolve the author from plagiarism. The chapters describing various wetlands are still worse as not only the text is borrowed heavily from the web but even the photographs have been copied. In case of India, wetlands have been selected at random and the description is highly uneven. For example, Dal lake in Jammu & Kashmir is one of the most investigated systems, and there are several Ramsar wetlands in the State. However, the account of wetlands of Jammu and Kashmir (p. 387-388) is among the poorest, although it is partly covered in a chapter on high altitude water bodies. The brief para on a typical Kashmir Himalayan lake (p. 388) does not even mention the name of the lake for which only a bit of information on primary production is provided. It is difficult to understand the importance of the pieces of information on isolated components and long lists of biota.

The next group of chapters deals with aspects of fisheries as well as use, problems, management and conservation of wetlands but the placement of these chapters is quite illogical. The fish catching devices (the large diversity of nets and gears) used in India are described first and then follows an account of the "instruments to harvest fish" - the fisherfolk. Instead of a general account for even the Indian fisherfolk alone, this chapter is based on the author's studies on some wetlands in Assam only. The last chapter of the book is a brief description of a few aspects of management of fisheries in Indian wetlands. Sandwiched between the chapters on fisheries is a casual account of potentials and problems of wetlands, various developmental activities and aspects of their management and conservation. Some aspects of human impacts

on wetlands such as siltation and eutrophication, hydrological alteration and exotic species are mentioned briefly in general and for several Indian states. The chapter on developmental activities refers to only aquaculture in Indian perspective whereas the chapter on management again focuses on fisheries and their community based management.

The book suffers badly from ethical viewpoint. Besides, text the photographs and tables are also plagiarised. In no case the source of photographs is mentioned throughout the book. Tables are extremely rare and with out acknowledgement of the source. Figures have not been used at all. The outline maps of location maps of numerous water bodies are of no value whatsoever. Majority of the photographs are very poor in quality, and in many cases nothing can be seen (e.g., p. 369, 384, 395, 424, 447, 448, 462, 464, 480, 498, 500, 513, 536, 538, 540). I could not find anything in the book to support the claim of the book to be “a handy guide for lab and field studies”. Many parts of the text are totally without any reference, and the references at the end of each chapter are certainly not up to date. The summaries

at the end of every chapter are generally repeated from the text. The hefty volume is neither suitable as a textbook in introductory course in limnology and wetland biology nor it can serve as a reference for research workers and administrators, policy makers, conservationists and environmentalists as claimed by the author.

Reviewing this volume leaves an impression that the publisher has also not cared to follow any guidelines for controlling the quality of the content and production or for preventing plagiarism. Such volumes may only dent the reputation of the publisher.

Ho, S-C. 1995. Status of limnological research and training in Malaysia. Pages 163-189, In: Gopal, B. and Wetzel, R.G. (Editors) *Limnology in Developing Countries*, Vol. 1. International Association of Theoretical and Applied Limnology, USA

Mitsch, W.J. and Gosselink, J.G. 2007. *Wetlands*. John Wiley, New Jersey, USA. 582 pages.

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