



BOOK REVIEWS

Marine Pollution, R.B. Clark, 1989. Oxford: Clarendon Press, 220 p. ISBN 0-19-854265-8.

This book is an introduction to the subject of ocean contamination of wastes created by humans. It is most appropriate for undergraduates in the field of study, or for others who want an easy to read, but technically accurate and reliable first guide to marine pollution. The author presents the facts of types and amounts of pollutants and does not make value judgments of a political, economic, or legal nature in hopes of allowing the reader to form her/his own conclusions.

Chapters are laid out in a logical order beginning with a definition of pollution and then presenting a series of chapters which explain the components of his definition. These include the following: Oxygen Demanding Wastes, Oil Pollution, Conservative Pollutants, Metals, Halogenated Hydrocarbons, Radioactivity, and Solid wastes and Heat. The author then presents a chapter which discusses the state of 5 seas (The North Sea, The Mediterranean Sea, The Baltic Sea, The Caribbean Sea, and The Caspian Sea). Finally he presents a chapter entitled "Assessing Pollution Damage" which outlines the seriousness of pollution damage, and the problems of measurement of pollution impact. He closes with a statement of the place of science in pollution assessment.

The second edition differs from the first in the organization of chapters and chapter headings. The first chapter outlines what pollution is. The second chapter has been retitled from Organic Wastes in the first edition to Oxygen Demanding Wastes in the second edition. There is a more general discussion of oxygen demand which includes chemical oxygen demand as well as biochemical oxygen demand. There is also a

more logical organization of chapter headings placing "Consequences of Organic Discharge to Estuaries" and "Consequences of sludge dumping at Sea" before "Enrichment and Eutrophication" and "Public Health Risks". This emphasizes the processes which we are familiar with in lakes, but which are now occurring in the seas and gives more importance to the public health risks associated with marine pollution due to organic wastes.

In the first edition, Chapter 3 was entitled "Oil Spills and Clean-up" and Chapter 4 "Consequences of Oil Pollution". These have been collapsed into one chapter entitled "Oil Pollution". This reflects the author's statement that there has been a change of "fashion" of marine pollution and a recognition of the importance of other types of human-induced wastes at sea.

The chapter on conservative pollutants, those pollutants not subject to bacterial attack and breakdown, has remained the same. The next chapter on Metals has been expanded to reflect better estimates of atmospheric input and the effects of other metals such as tin.

The chapter on Halogenated Hydrocarbons has been updated to include an examination of ocean incineration and gives more prominence to the persistence of these pollutants.

Overall, the text is well illustrated with clear diagrams and maps. The author has selected good examples which graphically and verbally illustrate the various types of pollutants and gives enough detail to make the problems associated with waste disposal at sea understandable without being technically heavy. It is an excellent first read on the topic.

Mary-Louise Byrne
McMaster University
Hamilton, Canada