

Gary M. Pierzynski, J. Thomas Sims, George F. Vance (Eds.), *Soils and Environmental Quality*, third ed., Taylor & Francis, Boca Raton, FL, 2005, 583 pp., US\$ 79.95, UK £32.99, ISBN 0-8493-1616-2.

This book is the third version of a text written for an upper level undergraduate course in soil and/or environmental science. In the preface, the authors write:

“In this book, we first provide an overview of basic soil science, hydrology, atmospheric chemistry, the classification of pollutants, and the fundamentals of soil, plant, and water analyses. Nitrogen, phosphorus, sulfur, trace elements, organic chemicals, global climate change, acid deposition, and remediation of contaminated soils and groundwater are discussed in depth. We have also included comprehensive discussions of nutrient management planning. Interactions of potential pollutants with terrestrial ecosystems and aquatic and atmospheric environments are emphasized. The concept of human and ecological risk assessment is reviewed using several contemporary examples such as pesticide concentrations in drinking water and contamination of soils by trace elements in organic by-products.”

Not only have the authors discussed the above topics from an agricultural concept, but they have also delved deeply into soil contamination and other environmental issues. As I often do to illustrate a book's coverage, I will reproduce the titles of the sections and chapters:

- Part I—Fundamentals of Environmental Quality:
 1. Introduction to Environmental Quality.
 2. Our Environment: Atmosphere and Hydrosphere.
 3. Our Environment: Soil Ecosystems.
 4. Environmental Testing; Soils, Waters, Plants, Wastes, Organics.
- Part II—Nutrients, Management, and Environmental Quality:
 5. Soil Nitrogen and Environmental Quality.
 6. Soil Phosphorus and Environmental Quality.
 7. Soil Sulfur and Environmental Quality.
 8. Nutrient Management Planning.
- Part III—Inorganic and Organic Contaminants:
 9. Trace Elements.
 10. Organic Chemicals in the Environment.
 11. The Atmosphere: Global Climate Change and Acidic Deposition.
- Part IV—Contaminant Assessment and Remediation:
 12. Remediation of Soil and Groundwater.
 13. Risk Assessment.

There are also several indices at the end of the book, one of which contains a list of more than 190 environmental journals. This list was of surprising length to me. Finally, the book ends with a comprehensively detailed index 57 pages long.

Without exhaustively discussing the excellent material provided in the book, I will note some points that were of interest to me.

- Each chapter ended with a reference list and a list of supplemental readings.
- Student assignments provided with each chapter; most of the assignments required prose answers but others involved mathematical computations.
- Most of the mathematical examples in the book were quite elementary.
- There were several beautiful color figures in the center of the book that depicted global sulfur emissions, fish habitats affected by AMP, phytoremediation and acid deposition, among others.
- Internal “mini-issue papers” which were approximately one page long were found throughout the book. Entitled Environmental Quality Issues/Events, among the many topics included were: Rehabilitation of a contaminated wood-preserved site in Laramie, WY; Phytoremediation of petroleum-contaminated soils: case study; and Nutrient management legislation and policies in the United States: voluntary or regulatory?
- Environmental topics unexpectedly discussed (in a soils book) were water quality (MCLs or maximum contaminant limits allowed in drinking water), radionuclides and air quality (including acidic deposition, greenhouse gases, etc.).

Clearly, my field of expertise is not soil quality. I do, however, claim to be able to recognize good writing and good text. This book fills both criteria.

Gary F. Bennett*

*University of Toledo, Department of Chemical and Environmental Engineering,
Mail Stop 305, Toledo,
OH 43606-3390, USA*

* Tel.: +1 419 531 1322;

fax: +1 419 530 8086.

E-mail address: gbennett@eng.utoledo.edu

8 August 2005

Available online 17 November 2005

doi: 10.1016/j.jhazmat.2005.08.049

Richard F. Pilch, Raymond A. Zilinskas (Eds.), *Encyclopedia of Bioterrorism Defense*, John Wiley & Sons, Inc., Hoboken, NJ, 2005, 569 pp., US\$ 295, ISBN 0-471-46717-0.

This is a unique book that is innovative, informative, and frightening. The book, the editors note, “. . . intertwines the social sciences, security issues, weapons engineering, the natural sciences, and the physical sciences, and presents a moving target in that bioterrorism defense is a rapidly advancing and mutable field.”

This review was written at the time of the bomb incidents in the UK, so the book was of heightened interest to me. In my reading, I came upon an article entitled “United