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-preservative 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.

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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

Kingdom: Bioterrorism Defense." Filling 16 pages, this section was the longest in the book. It begins as follows: "The UK government has long been prepared to deal with disaster in whatever form it may take—natural, accidental, or deliberate." Given the succession of arrests made after the bombings, one can conclude that the UK was well-prepared for the terrorist attacks.

As I leafed through the book (and I did briefly glance at every page), I detected categories or topics (which, by the way, were in alphabetical order by heading) beginning with a section entitled "Abu Sayyaf Group" and ending with a section entitled "Weather Underground: A Case Study (Students for a Democratic Society ((SDS)), Weathermen)."

The groups of topics in the book include the following:

- *Terrorist groups*: Abu Sayyaf Group, Aliens of America, Al-Qua'ida, Armed Islamic Group: a Case Study, Army of God, Baader-Meinhof Gang (Baader-Meinhof Group, ROTE, ARMEE, Fraktion), Chechen Separatists, ...
- *Biological agents*: Anthrax (*Bacillus anthracis*), botulism toxin, brucillosis, glanders (*Burkholderia mallei*), hemorrhagic fever viruses, smallpox, ...
- *U.S. government agencies*: Central Intelligence Agency, Centers for Disease Control, Edgewood Chemical Center, U.S. EPA, F.B.I., Food and Drug Administration, Fort Detrick and USAMRIID, Homeland Defense, Los Alamos National Laboratory, ...
- *Foreign countries*: Cuba, Iran, Iraq, Israel, Korea, Kurdistan, Lybia, Sudan, Syria, ...
- *Individuals*: Diane Thompson—a case study, Larry Wayne Harris, ...

In summary, I will return to the editors' preface which says: "And while we have aimed to be as comprehensive as possible, possibly the greatest lesson of our work is that, particularly in the (scientific) age of biotechnology and the (sociological) age of terrorism (at least as far as the public perception is concerned), the realm of bioterrorism is without bounds."

In my opinion, this book will be immeasurably useful in that defense with the information contained in it. Needless to say, I found the book fascinating and will from time to time return to it to read a section or two. The information contained in the book should be extremely valuable to all local emergency-planning agencies worldwide.

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G.W.A. Milne (Ed.), Gardner's Commercially Important Chemicals: Synonyms, Trade Names, and Properties, John Wiley & Sons, Inc., Hoboken, NJ, 2005, 1201 pp., US$ 150.00, ISBN 0-471-473518-3.

This book contains information on 4174 chemicals. The editor notes that:

> "The main criterion for inclusion of a material in this handbook is its importance as a significant commercially available chemical. Thus all bulk inorganic chemicals are included, all major pesticides (herbicides, insecticides, antifungal agents, and so on) and many dye stuffs, surfactants, metals and inorganic compounds are described in this book."

The editor also notes that "For each chemical, the appropriate identifying information (CAS Registry Number, structure, molecular formula and chemical name is provided) and in each case, an exhaustive list of known synonyms is given."

This book is divided into three sections: (1) Main Section, (2) Index Section (which contains three indexes), and (3) Directory of Manufacturers and Suppliers.

Section 1 contains the data on each chemical as noted above. Section 2 has, as noted, three indexes: Index 1 contains locator systems using CAS Number, Index 2 enables the reader to locate the number for any European Inventory of Existing Commercial Chemical Substances Number, and Index 3 contains all names, synonyms, and trade names and their identifiers for the compounds in the data base.

Section 3 is a directory of chemical manufacturers and suppliers whose products are described in the book with the entries being in alphabetical order by company name; if available, the postal address, telephone number, fax number, and website address were provided.

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Thomas F.P. Sullivan, Editor Emeritus, et al., Environmental Law Handbook, 18th ed., Government Institutes/Scarecrow Press, Lanham, MD, 2005, 948 pp., US$ 99.00, ISBN 0-86587-985-0.

In the opening paragraph of the book, the author of this section notes:

> "Over the past three decades, 'environmental law' has evolved into a legal system of statutes, regulations, guide-