The book concludes with a generous glossary, a very current literature cited, and two Appendices, one containing an example of a forest management plan for a nonindustrial private forest and the other a hypothetical ethics case concerning diameter-limit cutting. The literature cited, along with the generous text citations, will allow readers to easily pursue subjects of interest.

To the extent it is possible in a single book, Professor Hicks has achieved his objective of writing a comprehensive guide to the understanding and management of forests in the Central Hardwood Region. This book synthesizes information from textbooks and research literature along with the author’s experience to provide information in a form that can be readily interpreted and applied by the reader. Professional forest managers familiar with forest management principles should find much useful practical information directly related to central hardwood forests. Other land managers, including wildlife biologists and managers, district conservationists and other soil scientists, and recreation land managers should find the book a good single reference or starting point for learning about the management of central hardwood forests. Knowledgeable landowners seeking more in-depth, practical information on the management of their forests will find this book valuable. Extension and other educators should find it an excellent text for short courses for land managers and advanced landowners. And, it should also serve as a valuable reference or supplemental text for certain university courses, particularly within the Central Hardwood Region.—RANDALL B. HELLMANN, School of Natural Resources, The Ohio State University, 210 Kottman Hall, 2021 Coffey Road, Columbus, OH 43110-1085 (helllmann.1@osu.edu).

An Invitation to Environmental Sociology


This book is part of a series focusing on current issues in the social sciences. Environmental sociology deals with the community in both the social and ecological senses. It applies the study of social inequality to environmental problems. Workers trained in the natural sciences will find the text a clear, useful introduction to the ideas of social scientists who have studied humanity’s relationship with nature. Bell presents many of the classical environmental stories such as Hardin’s Tragedy of the Commons and the shift to the car-dependent nation. He also presents some newer ideas arguing that it is a romantic myth that New England has poor soil and that wilderness is a very American ideal that may not work elsewhere for species preservation.

The book is well referenced with an index and 33 pages of end notes and references. There is a brief survey of the traditional environmental issues to which he adds environmental justice, economic inequality, and the beauty of nature. In the remaining seven chapters he discusses the material and ideological factors that affect the environment and finally how that information can be used to reorganize society. I noted just a few typos or omissions including note 36, p. 288, where the final number should be $3.75 and on p. 13, where hydrocarbons were omitted from the discussion of photochemical smog and ozone.

Bell analyzes the material factors of consumption, technology, and population. To illustrate his ideas he uses “Social Action Case Studies,” historical examples, and current events from North America and throughout the world. One case study examines the simplicity movement where people intentionally reduce material consumption. He uses the growth of the factory hog farm to argue that the economic treadmill to increase production often creates negative social and environmental consequences. Another tool is his presentation and critique of the ideas of several sociologists, economists, or philosophers. I found especially interesting his analysis of why people consume more than they “need.”

Our ideology also affects the environment. The roles of Protestantism, gender, and individualism are analyzed. Factors that have caused a shift from environmental domination to environmental concern are discussed. Finally the meaning of nature is critiqued. Bell cautions that in the past what was natural was used to justify unregulated capitalism and scientific racism. Today decisions about international parks, genetic engineering, and pollution regulations depend in part on the “human nature of nature.”

Bell intends his text to take an activist position. His final chapter gives examples of creating a sustainable society. Examples range from bicycle-powered delivery in Iowa to helping farmers use local knowledge to develop integrated pest management in Honduras. He argues that although personal actions are important, reorganizing our communities by increasing democracy is vital.—LOREN D. HINTZ, Science Dep., Chapel Hill High School, 1709 High School Rd., Chapel Hill, NC 27514 (lhintz@chccs.kl2.nc.us).

Nutrient Use in Crop Production


Nutrient use is an important issue for improving crop production to meet the demand for food and fiber by the growing world population while minimizing the negative impacts on environmental quality. To achieve this goal, farmers, soil scientists and agronomists, plant breeders, environmental scientists, and policy makers should work together to develop a sustainable production system for growing nutrient-efficient crops adapted to specific environments. This book contains up-to-date scientific information and practical experience on nutrient use in crop production and should be of interest and useful to a wide audience.

The book is organized into 10 chapters with 26 tables, 25 figures, and about 880 references. The first two chapters discuss the general trends in the production of food, feed, and fiber in relation to their distribution, and in terms of population demand and soil fertility decline. The discrepancy between the site of food production and the site of food consumption is identified as one of the main causes of soil nutrient decline. Shortages of fertilizer often restrict food production in developing countries. In many of these countries, however, water supplies limit nutrient use efficiency, especially in countries where there is increasing competition for water use between agriculture and industry. To produce enough food to meet the demands of a growing population, policy changes are required to solve the dilemma of increasing industrial growth and the degredation of agricultural resources. The book provides readers with current knowledge on the types and levels of nutrient losses, their economic importance, and environmental impacts of developing efficient production systems. To develop site-specific sustainable production systems, it would have been useful to address the roles and importance of current research and development on conservation tillage, crop rotation, and management of municipal sludge and farm manure in cycling nutrients and maintaining soil fertility.

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