

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Great Plains Research: A Journal of Natural and
Social Sciences

Great Plains Studies, Center for

Fall 1999

Review of *Ecosystem Management: Applications for Sustainable Forest and Wildlife Resources* Edited by Mark S. Boyce and Alan Haney

Roger Suffling
University of Waterloo

Follow this and additional works at: <https://digitalcommons.unl.edu/greatplainsresearch>



Part of the [Other International and Area Studies Commons](#)

Suffling, Roger, "Review of *Ecosystem Management: Applications for Sustainable Forest and Wildlife Resources* Edited by Mark S. Boyce and Alan Haney" (1999). *Great Plains Research: A Journal of Natural and Social Sciences*. 479.

<https://digitalcommons.unl.edu/greatplainsresearch/479>

This Article is brought to you for free and open access by the Great Plains Studies, Center for at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Great Plains Research: A Journal of Natural and Social Sciences by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Ecosystem Management: Applications for Sustainable Forest and Wildlife Resources. Edited by Mark S. Boyce and Alan Haney. New Haven: Yale University Press, 1997. xiv+361 pp. Figures, tables, notes, references, index. \$45.00 cloth (ISBN 0-300-06902-2), \$18.00 paper (ISBN 0-300-07858-7).

The papers in this volume, gathered from a March 1994 symposium at the University of Wisconsin, survey the field of ecosystem management, are avowedly oriented toward the US, and concentrate on forest systems, though readers from abroad and those interested in aquatic systems and grasslands will also find matters of interest here. The editors have organized the book into five sections. "Ecological Framework" embraces ecosystem management, landscape ecology, keystone ecosystems, maintenance of rare species, and the role of mineral cycling. The "Disturbance" chapters cover riparian habitats and forested wetlands. "Techniques and Classification" includes classification of ecological landscape units, GIS and remote sensing, and population viability analysis. "Making It Happen" concerns ecosystem protection and restoration, silviculture, and protecting aquatic diversity. A single chapter on "Future Directions" completes the work. Most papers are extensively referenced, and several contain mini-primers on such subjects as macro-nutrient cycling, justifying a wider potential readership than the volume's title suggests. Ideas new at the time of the symposium (such as deMaynadier and Hunter on keystone ecosystems) and various case studies add further appeal. The book is well indexed, sturdily bound, and reasonably priced, though poorly illustrated.

Organizing papers by diverse authors is always a demanding enterprise, even more so in such a burgeoning field as ecosystem management. Nonetheless, this volume summarizes the field admirably. Some well-accepted themes, to be sure, appear with mind-numbing regularity (adaptive

management, for instance, and the importance of scale). Some papers take a narrow focus, resulting in information gaps. Why does the disturbance section, for example, neglect fire and soil erosion, and why is acid deposition discussed in detail while the wider range of long-distance transport pollutants is not?

The real strength of this volume for the scholar-practitioner, however, lies in disparities and disagreements among papers. We learn, for instance, that adaptive management is inherently incremental (Franklin; David; Haney and Boyce) and that mistakes of the past make some authors skeptical about rapid adoption of new practices (e.g., Boyce; Noss and Scott). Franklin, however, argues that rapid innovation may prove beneficial in our rapidly emerging global ecological crisis. This is a fundamental risk management dilemma.

Likewise, some would manage ecosystems primarily within protected areas; others prefer to see ecosystem protection predominantly in the general landscape matrix. Jack Ward Thomas has skillfully highlighted a number of these paradoxes in his foreword.

A final issue is the familiar scientific lament in several chapters: we need scientific rigor, and we *are* increasingly rigorous, so why is nobody listening to us? Most of the authors fail to answer the question or offer only platitudes: we need closer integration of science and policy making; we need better public education; the real challenges are institutional; barriers between managers and scientists must dissolve. Fortunately, Norman Christensen does suggest answers in "Where Do We Go from Here?" He addresses directly the challenges of defining our capacity to accept risk and of understanding accountability. Scientists generally still need to translate science more skillfully in the community, and they need to absorb non-scientific information more effectively. Christensen observes that, most of all, they must earn public confidence for ecological landscape innovation. Thus ecosystem management is at the same developmental stage as environmental assessment was in the 1970s: having been generated by the sciences, it is in the painful process of mastering and using socio-political realities. As Thomas urges in the foreword, "Let's get on with it." **Roger Suffling**, *School of Planning, University of Waterloo*.