Ecosystem Management:

Adaptive, Community-Based Conservation By Gary K. Meffe, Larry A. Nielsen, Richard L. Knight, and Dennis A. Schenborn

Island Press, Washington, DC; 2002, 313 pages, \$40

As do all professions, natural resource management reflects the social and political context of the times. In the final two decades of the twentieth century, a number of concepts emerged of what might constitute an approach to effectively implementing public priorities regarding ecological and natural resources. The various specialties of natural resource management developed somewhat different concepts, and they were described by a variety of shorthand, often confusing, descriptors such as watershed approach, community-based conservation, collaborative stewardship, adaptive management, new forestry, landscape-scale environmental protection, place-based management, and various formulations of ecosystem and ecosystembased management. These concepts were usually not rigorously defined and differed in many ways, but they all purported to offer a different way to manage natural resources than had been done prior to the 1980s. This book reflects a distillation of these concepts into what has survived and become generally and loosely known as "ecosystem management."

The book is organized around three themes or elements of ecosystem management: (1) the tools available to the ecosystem manager, (2) the essential ecological concepts that need to be understood to use the tools, and (3) the sociological and institutional elements that must be understood and appreciated in order to implement an effective management strategy.

What we now generally call ecosystem management is not a revolution in natural resource management, but rather the latest stage in its development. From the early 1900s through the 1960s and even into the 1970s, and as long as a reasonably clear public unanimity existed about what the priorities of natural resource agencies and managers should be, such a consensus allowed, even encouraged, traditional, technocratic, command-and-control management to flourish. During the 1970s the public consensus began to evaporate and was obliterated by the 1980s. Technocratic, top-down approaches no longer worked well in such a pluralistic, balkanized society where political confrontation, power politics, and legal attack are often considered the most effective weapons available to various policy advocates. The authors provide a manual on how best to operate in the current, often intimidating, social and legal context, and avoid the confrontational, adversarial relationships that so often characterize attempts to manage natural resources.

I like the book and commend the authors for providing a readable, timely, and relevant text. It provides a good balance between facts and self-learning through discussion of real world case studies. It reads well and shows the experience of the authors in teaching the material. In fact, the book developed from the involvement of the authors as instructors in the U.S. Fish and Wildlife Training Center in

Shepherdstown, West Virginia, where they taught this course 20 times. It is apparent that the book benefited from their hands-on teaching experience.

From a teaching perspective, this book differs from many others because it is intended to actively engage students in the learning process. The casestudy approach is used throughout the text, and it is effective. Because ecosystem management involves an ecological, institutional, and socio-economic context, the case studies emphasize the integration of all three elements. They also reflect an excellent geographic balance, although they are nearly all from within the United States.

In summary, I recommend this book to anyone teaching a class on broad-scale natural resource management, environmental conservation, or biological resource management. It is well written, adequately illustrated, and offers a wealth of specific, current examples of natural resource issues and challenges.

> -Robert T. Lackey National Health and Environmental Effects Research Laboratory U.S. Environmental Protection Agency Corvallis, Oregon 97333, USA

