

Little Islands Floating in Seas of Indifference?

NATURE RESERVES; ISLAND THEORY AND CONSERVATION PRACTICE 1990. by Craig L. Shafer. Smithsonian Institution Press. Washington and London. 189 pp. ISBN 0-87474-805-4.

Nature reserve design acts as the link that connects conservation with the sciences of biogeography, ecology, conservation biology, landscape ecology, evolution, genetics, demography, and more. Our use of this link has made it possible for us to examine such subjects as park shape and consequences of insularity. It has made it possible for us to study park capacity for protection, dispersal, emigration, population viability, and extinction. The production of technical literature contributing to various aspects of conservation, including facets of reserve design, has accelerated.

Park boundaries confine protection administratively but not necessarily ecologically; in addition, certain species, communities and processes are affected deleteriously or beneficially by this confinement. The complexity of these processes and the superimposed forces associated with human presence have been the object of controversy. A clear review and translation of available knowledge is badly needed, equally for managers and researchers interested in the conservation of natural areas.

Shafer's book presents these matters, focusing on what it is to conceptualize and design a nature reserve. He goes further to question whether we have any solid guidelines for reserve design. He reviews existing guidelines, and attempts to show a least-biased view of whether these are fine prescriptions or rules of thumb. He has designed his sections so that they are short, and easily read. The book's design simplifies reading for those who face interruptions or who wish to digest the information-loaded work, one small portion at a time. Throughout the book within sections, he immediately states the point and purpose of his writing and clearly summarizes his material so that it provides an excellent teaching, review and reference tool. The summaries also function as useful tests to judge whether one understands the essential messages delivered in the often complex arguments and controversies he describes.

The clarity and thoroughness of Shafer's style is refreshing and sorely needed. The benefit is not only for his primary intended audience, but for the community conducting research in contributing fields. Of special interest to managers and friends of U.S. National Parks: the author grasps and communicates all too well the impermanence of the "vignette." He uses writings of Leopold and Company effectively, providing interpretations that show considerably more depth than those previously made available.

The author focuses his attention on where lies the body of evidence that supports or conflicts with theories and hypotheses proposed in the literature. He recognizes the shortcomings of having a poorly documented institutional body of knowledge, and points out works having too little "real" documentation. Yet, his argument for stated shortcomings of the available theory also rests to a large extent on institutional experience. To this extent he permits himself reasonable editorial license. To do this conservatively, as he does, allows the body of managerial experience to serve as the testing platform for ideas. Ideally he could also use it as a stimulating mechanism for new research.

As the author of a major review he is in a good position to use his knowledge to produce the type of

synthesis that would provide such a stimulation. But, he seems to have stopped short of this, perhaps intentionally. He holds tightly to his primary purpose of review and translation and, avoids jeopardizing the effectiveness of his translation effort. This may be disappointing to those reading this work for more than review or reference value. The author missed a unique opportunity to move forward, tying together the best of the professional literature and professional experience.

The subject treatment generally is exhaustive. He re-stresses that planning for nature reserves needs to consider cross-boundary processes, that buffers are necessary elements of protection, that reserves should be planned and designed with regional not just localized planning in mind. No less important is the need for human considerations, including population growth, economics, and social conditions, to be integral parts of the analysis. Yet, on having seen a section title for paleontology, I had expected to see a discussion of species associations and concepts of community as recent studies in paleoecology have treated them. The studies he represents do not include this subject area and the chapter lacks a discussion of changing insights regarding climax and stability of species associations.

Except for this minor point, the review is the most thorough and clearly presented one I have yet seen on the subject of nature reserves. While I may differ slightly in some interpretations, there are no subjects where I have clear departures in thought from the author. Shafer uses existing knowledge upon which to base his judgments, rather than trends in the popularity of concepts. Few of us can boast such a good handle on our material.

The section, "General Guidelines" in the end of his work (pp. 142-3) is an effective summary of the material. It rests on a basic foundation of knowledge, and fills a real need for review and translation. However, it is very much a collage of other similar lists of recommendations on reserve protection, design or management. It reflects his conservative approach, and shies away from synthesis. One of the most valuable messages the author stresses throughout, first caught my eye in his Preface, "The overall context of individual nature reserves, in relation to one another and to their modified landscapes and their people needs more careful concern." The guidelines provide observations that underscore this as a subject the designers of parks ought to focus upon.

Shafer's book will make an excellent reference and teaching tool, and will perhaps to be used more broadly than he anticipated. His work is a good introductory and refresher text on the uses, developments, applications and alternative hypotheses on nature reserve design. The 189 pages that report Shafer's review, comprise only the fine polished surface of what has been clearly a painstaking effort. The psychological analog he borrows for describing parks, as "islands of pain in seas of indifference," sounds harsh, but is well chosen.

*A footnote: For those who enjoy Shafer's book and are interested in more self-education on conservation of natural areas, I recommend John Perin's (1989), **A Forest Journey; the Role of Wood in the Development of Civilization**. Published by W. W. Norton and Co., N.Y. This is a different type of review, a thorough*

historic analysis. It widened my perspective on the uniqueness and durability of 20th Century parks. beginning with Mesopotamia forests (4000 B.C.) and their subsequent depletions. History does recapitulate itself and, Schafer's book causes me to ask myself how the present differs from the past.

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