

Review: **Natural Experiments: Ecosystem-based Management and the Environment**

By Judith A. Layzer

Reviewed by Elery Hamilton-Smith
Charles Sturt University, Australia

Layzer, Judith A. *Natural Experiments: Ecosystem-Based Management and the Environment*. Cambridge, MA: MIT Press, 2008. 365pp. ISBN 9780262622141. US\$28.00, paper. Alkaline paper.

This book has almost identical objectives and methodology as Doyle and Drew in their *Large-Scale Ecosystem Restoration* (see review in volume 28, issue 1, [Review: Large-Scale Ecosystem Restoration: Five Case Studies from the United States](#)). Both set out to assess major ecosystem restoration projects. Doyle and Drew coordinated a series of five multi-disciplinary reviews and produced an edited volume. Their book had a strong focus on holistic perspectives and each of the authors expressed themselves with admirable clarity. Layzer carried out a major review and wrote her comprehensive report of seven projects as an individual scholar. She maintained a strong commitment to rigorous methodology and presented her findings in considerable depth and detail, which makes her book less easy to read and absorb.

Interestingly, both books included the Everglades and the California Bay Delta projects. In each of these, the accounts complement each other but are generally in agreement. Interestingly, there is little overlap in the underlying theory and conceptualization or in the methodological implementation of each study. Nevertheless, both challenge the common belief that such projects will achieve much greater positive effect if they involve a wide range of stakeholders.

Layzer certainly achieved a valuable level of comparability across her seven studies. This lies large in her establishment of clearly defined definitions throughout, and in particular clearly defined indicators of program elements and of outcomes. She uses tables to very good effect in summarizing, for instance, apparent contradictions in the positive and negative assessments in valuation of stakeholder involvement (pp. 24-30) and in listing her criteria for evaluation of outputs and outcomes.

Her study remains focused upon the relationship between the managerial arrangements for planning and implementation of environmental policies on one hand and eco-system health on the other. Many professional researchers will find her book very powerful and an excellent model of well-controlled research upon a complex and dynamic phenomenon. On the other hand, many environmental and other civic stakeholders are likely to find that she gives all too little attention to what they see as the important interactive relationship between civic society and environmental health.

In her work, stakeholders are primarily seen as being involved through their membership of committees, boards and the like. They are also largely seen as Federal agencies, State agencies and the Business Communities. Given the nature and rigor of her approach, coupled with the focus on outcomes in ecosystem health as the very basis of project establishment, this is appropriate and virtually inevitable.

Overall, she has produced excellent research and her book must be taken very seriously. It highlights, just as Pressman and Wildavsky did 35 years ago, the complexity and inevitable difficulty of action within a federalist structure. She does make a significant addition to our understandings of this dilemma and indicates potential directions for greater effectiveness.

In view of the ways in which this book and *Large-Scale Ecosystem Restoration* complement each other I can only recommend that most readers will gain a more holistic understanding and benefit significantly from reading both books.

Elery Hamilton-Smith <elery@alphalink.com.au>, Professor, Charles Sturt University, Australia, P.O. Box 36, Carlton South, Victoria 3053, Australia. TEL: (613)9489.77850.