

Three New Publications Guide Decision-Making for Planners, Managers

Note from the editor: The field of marine protected areas is benefiting from an ever-expanding library of books and reports on aspects of planning and managing MPAs. As a service, MPA News will offer brief reviews of publications that may be of special interest to subscribers. Although the geographic focus of each of the following publications is limited to the North and South American continents, the usefulness of each will likely stretch beyond that hemispheric bound of study.

Setting Geographic Priorities for Marine Conservation in Latin America and the Caribbean

By Kathleen Sullivan Sealey and Georgina Bustamante. 125 pp. Arlington, Virginia, USA: America Verde Publications (The Nature Conservancy). Free.

For this report, Sullivan Sealey (a biologist from the University of Miami, US) and Bustamante (a conservation coordinator for The Nature Conservancy, US) have worked to identify the ecoregions in greatest need of protection in waters surrounding Central and South America and the Caribbean. Their report represents the third and final stage in a project to catalog high-priority conservation areas throughout Latin America and the Caribbean, the first two stages of which focused on terrestrial and freshwater ecoregions. The project was funded by the US Agency for International Development (USAID) and led by a consortium of NGOs.

By creating a baseline account of areas that exhibit unique biological value -- and whose biological value is under significant threat -- the authors aimed to support the decision making of practitioners and policy makers. They write, "The preservation or restoration of [hydrological or hydrochemical] linkages, the selection of special conservation sites, and effective stewardship action all depend on sound scientific information. We hope that this report serves as an initial step in the provision of this information."

It does. With a team of 28 marine biologists and fisheries scientists from throughout the study area, the authors divided Latin America and the Caribbean into nine "biogeographic provinces", and sub-divided each of these into marine ecoregions. Each ecoregion was ranked according to biological value -- measured by such factors as species composition, abundance, and endemism -- and conservation status, measured by loss of species, changes in abundance, and potential threats, among other indicators. The report provides examples of the scorecards used, as well as 14 full-color maps.

MPA practitioners and policy makers in the Central Caribbean ecoregion might particularly appreciate the report's separate, more-detailed case study, in which their ecoregion is subdivided further into 51 "coastal systems". This detailed case study was intended to identify specific sites for marine conservation action and coastal stewardship programs in the Central Caribbean area. Regrettably, the authors were unable to apply this level of resolution to the analysis of other ecoregions, due to funding limits.

Sullivan Sealey and Bustamante emphasize that donors of conservation funds should use this report to strategically target their investments to achieve the greatest conservation good. It goes without saying that other regions of the world could benefit, too, from consulting this publication: The methods used would provide a useful template for the ecoregion-level study of other coastal environments.

To order: This publication is available for free. For a copy, contact Eva Villarubi, America Verde Publications, The Nature Conservancy, E-mail: americaverde@tnc.org.

Integrated Coastal Zone Management of Coral Reefs: Decision Support Modeling

Edited by Kent Gustavson, Richard M. Huber, and Jack Ruitenbeek. 292 pp. Washington, DC, USA: The World Bank. US \$35.

Every budget-conscious MPA manager is in search of the strategy that will offer the most resource protection at least cost. Finding this cost-effective strategy can involve tracking multiple variables, from socio-economic indicators to ecological criteria. With so many factors to consider, the manager's decision-making process can be challenging, at best.

In this report, the World Bank illustrates how modeling of management strategies can be applied to ease that decision-making. Using three coral reef study sites -- two in the Caribbean and one in the Indian Ocean -- the report measures the value of protecting coral reefs at these sites and indicates the most cost-effective management interventions to attain such protection.

The publication, with 13 chapters written by several North American and European researchers, offers interesting insights into how three coral reef sites -- Montego Bay (Jamaica), Curacao (Netherlands Antilles), and the Republic of the Maldives -- can have quite different economic and ecological challenges. Montego Bay, for example, gets its revenues from manufacturing, services, and tourism, making it a more complex economy than the usual "sun, sand, and sea" destination. What may be of greatest use to managers is seeing how the researchers adapted their models to fit each local situation.

The report's editors point out that they don't see these models as the only tools managers will need. "What is clear about decision support tools is that they assist in decision making, but are still an imperfect art," writes Richard Huber, an environmental specialist at the World Bank. "The fields of conservation biology and economics have separately struggled with an inability to provide adequate explanatory links between economic activities and species or ecosystem decline."

Nonetheless, the efforts detailed in this report indicate how decision-support models are improving, including by becoming more user-friendly. Accompanying the publication is a CD-ROM that offers the modeling tools developed for each of the study sites, allowing the user to examine the impacts of various growth scenarios, development choices, and environmental protection options.

To order: This publication costs US \$35. For a copy, contact World Bank Office of the Publisher, E-mail: books@worldbank.org; Web: www.worldbank.org/publications.

Protecting Our National Marine Sanctuaries

By DeWitt John. 118 pp. Washington, DC, USA: National Academy of Public Administration. US \$20 for bound version, or free to download from the Web.

The issue of cost-effectiveness is also at the center of this report, which offers a program analysis of the US National Marine Sanctuary Program (NMSP). As MPAs are still a relatively new field, formal program analyses such as this one -- anywhere in the world -- are relatively rare. What might make this report particularly useful to the MPA manager is that it analyzes the challenges and opportunities faced by a national MPA system as seen through the eyes of experts in the field of public administration.

The report was published by the National Academy of Public Administration (an independent analytical organization) and commissioned by the US National Ocean Service, which oversees the NMSP. Chief among its findings is that the program, although beginning to show some success with protecting resources, is still leaving some sanctuaries "without defenses": that is, without enough resources, authority, or community support to protect their ecosystems.

One of the NMSP's historic limitations has been its relatively small budget (although a recent, sizeable budget increase is expected to ease the restraints somewhat). In this light, the report calls on the NMSP to focus its funding and attention on results rather than on process. "The first priority should be to demonstrate what the program can achieve with its current sites," the report says. It calls on the program to "sharply reduce the time spent on comprehensive planning, and work in a more incremental way to identify key threats to [each] site, demonstrate the program's capacity to provide this protection, and then address other issues and threats."

According to the report, each sanctuary manager should ask these questions:

- What do I hope to accomplish this year to protect vulnerable resources with limited funding and personnel?
- Why have I chosen this approach?
- What has been learned from last year's efforts, and how are these lessons being applied to this year's work plan?

The report goes on to suggest that the program expand public involvement in the sanctuaries, clarify the role of local stakeholders in planning, and set priorities for education programs. Its appendix section offers profiles of each of the NMSP's sanctuaries, including resources, expectations, and strategic choices that each faces.

To order: This publication can be downloaded for free from the Web, at <http://38.217.229.6/NAPA/NAPAPubs.nsf?OpenDatabase>. A bound version of the report is available for US \$20 plus shipping costs by calling NAPA Publications at Tel: +1 301 617 7801.

