

## Challenging the We-Know-Best Approach

**The Science of Sustainable Development. Local Livelihoods and the Global Environment.** Sayer, J. and B. Campbell. 2003. Cambridge University Press, New York. 287 pp. (268 + xix). \$35 (paperback). ISBN 0-521-53456-9.

*The Science of Sustainable Development* is based to a significant degree on articles that have appeared in *Conservation Ecology* (now *Ecology and Society*) in the last several years, highlighting how that journal has become a hub of discussion about new social technologies and participatory principles for integrating scientific research into the promotion of more sustainable rural livelihoods. It represents one strand of thought about applying adaptive management strategies to collaborations between farmers and scientific researchers in the challenging setting of rural less-developed countries.

The authors place their work within what they call integrated natural resource management, which incorporates adaptive management, scientific research as a participatory process with other stakeholders, policies as experiments, extensive stakeholder consultations, and new, inclusive organizational structures. All these elements are, of course, essential components and prescriptions for what in the United States is called "ecosystem management." Why the different terminologies? For one thing, the integrated natural resource management discussed in this book is, with but a few notable exceptions, focused on helping small farmers change their practices to make them more productive and presu-

ably more environmentally friendly, although the latter dimension is not always clearly stated in some of the cases studied. The resources of primary interest in this book are soil and water, those resources of most critical need for most farmers. Thus, again with a few exceptions, this book does not much discuss forest management or agroforestry as arenas for applying the methods or using these techniques in managing larger ecosystems, although they could certainly be applied in these areas. It would appear that ecosystem management in the United States presupposes a broader range of management values than the authors have in mind here, but there is no reason why small farmers and other regional stakeholders would not have the same broader interests. Thus, I suggest that—among other things—this book identifies the need to begin integrating some of these concepts at a global level.

The book has very useful and effective sketches and analyses of efforts to establish multi- and interdisciplinary scientific research in collaboration with local, regional, and national stakeholders to construct new and more socially and environmentally friendly production regimes. In one example, which fits perfectly with U.S. conceptions of ecosystem management, they offer a frank and penetrating discussion of the efforts of the Center for International Forestry Research (CIFOR; one of the authors is the former director general of CIFOR and the other is currently a program director there) to establish a program of research and action on "more environmentally and socially sustainable management of forest lands" (p.

145). The Indonesian government allocated to CIFOR the 100,000 ha Bulungan Research Forest, an area used by local indigenous peoples that was supposed to be subjected to a logging concession.

CIFOR quickly found itself working in the entire region that encompassed the research forest for a variety of reasons. The effort provides an effective case study of the challenges and possible benefits of scientists collaborating with each other and with an array of local stakeholders. The authors note that "Even with good intentions and generally good interpersonal relations, it was simply not efficient for the different groups to work together and meet donor expectations. The situation was further complicated by the inevitable fact that different disciplines and different research programs often require different methods, locations and facilities" (p. 152). Researchers had a "weak shared knowledge base" and tensions emerged among them over their "understandings of the dynamics of land-use change and human well-being diverged" (p. 153). All was not lost, however, because "[t]he scientists did not pool their skills in a melting pot but rather worked in small teams on the elements of a mosaic. The result was a number of smaller groups of scientists moving forward in parallel on independent but interrelated research questions . . . with hindsight, we also now believe that this was a better strategy for learning and building-up a knowledge base than the purer approach of beginning with a single interdisciplinary model" (p. 159). All this provides a useful reality check on the

real problems and potential of interdisciplinary research (Daily & Ehrlich 1999).

The authors also offer a useful evaluation of the role of formal models in integrated natural resource modeling. They have an informed skepticism about the use of formal models and suggest that they may be of some use in situations where they are affordable and where there is close collaboration with other stakeholders. But the authors also note that models can quickly become divorced from any empirical reality and cease to be problem-solving tools. Sayer and Campbell advocate the use of "demand-driven throw-away models" (p. 101), with a conceptual and a rough systems model that uses the proprietary software STELLA. This type of model provides a general guide to research and action without investing a great deal of time and running the risk of constructing a model with little applicability to the actual situations faced by managers.

Most of the book, however, focuses on concepts and analyses of research scenarios with small farmers that place donors, researchers, and other levels of stakeholders as equal collaborators in a program framework that depends less on log frames and more on open, dynamically adaptive strategies for a generally stated goal. It turns out that there are quite a few of these projects around, and they seemed to have made some gains in changing the practices of small farmers (although the degree of change is not discussed much). But these approaches are still far from the norm in most development projects, which still favor top-down, we-know-best approaches, despite some encouraging signs of evolution to more decentralized approaches. Sayer and Campbell present an eloquent argument for the need to move from bureaucracies to what they call "ad hocra-cies," where project goals emerge from a process of negotiation between stakeholders, although they sadly note that "bureaucracy still prevails over the ad hocra-cy" (p. 246).

*The Science of Sustainable Development* has a rather narrow focus, but this also allows it to delve deeply into its subject matter. It would have been useful, however, to make more explicit links to larger debates. For example, there are many implications for the current debate about the impact and future of integrated conservation and development projects (ICDPs). Evidence from this book suggests that the tendency of conservation organizations to throw aside ICDP projects when they do not show results after a few years precisely misunderstands the requirements of working with local communities and the importance of long-term commitments, of "learning and innovating together," and of the "democratization of science" (p. 244). In many respects this book makes a useful companion to Margoluis and Salafsky (1998), carrying the approach described in that book deeper into stakeholder and small-farmer participation methodologies and into a larger landscape beyond protected areas. Sayer and Campbell's final call is that "[s]cience managers must respect the principles of ad hocra-cy, admit civil society to their ranks, reject the arrogance of technological perfection and actively seek to change and adapt" (p. 246).

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#### **Making Parks Work: a Thought-Provoking Argument, but Not a Guide**

#### **Making Parks Work: Strategies for Preserving Tropical Nature.** Ter-

borgh, J., C. Van Schaik, L. Davenport, and M. Rao, editors. 2002. Island Press, Washington, D.C. 511 pp. \$65 (hardcover). ISBN 1-55963-904-0. \$40 (paperback). ISBN 1-55963-905-9.

*Making Parks Work: Strategies for Preserving Tropical Nature* is the result of the 1999 White Oak Plantation meeting in Florida, organized by the Center for Tropical Conservation at Duke University and the Wildlife Conservation Society. Scientists, practitioners, and conservation agencies examined success stories of biodiversity conservation in the tropics in an effort to find ways to make tropical protected areas effective for conservation. The book is intended to be a guide for practitioners in the field, government administrators, conservation organizations, and funding agencies interested in supporting effective and sustainable tropical parks. The volume provides a general overview of the status of parks around the world, discusses a range of problems that parks face, and suggests strategies to improve biodiversity conservation within parks. The book is arranged in four parts: an introduction, which sets the tone; a series of case studies; a discussion of crosscutting themes at park, national, and international levels; and a presentation of synthetic conclusions.

In the introduction, the editors assert the necessity to manage parks "as a haven for a nature where people, except for visitors, staff, and concessionaires, are excluded" (p. 6). From there, they turn to a critique of the integrated conservation and development project (ICDP) model, which has become the primary challenge to the traditional "haven" approach to parks. The editors then contest the assumptions underpinning integrated conservation and development projects (ICDPs) and contend that "[p]arks are simply not the proper arena for resolving social inequities" (p. 25). In the final chapter of part 1, they respond to local opposition to park formation by taking a historical perspective to argue that

strong public support usually develops after a park has been created.

The case studies in part 2 are drawn from tropical regions around the globe. The section on Africa ranges from nearly hopeless West Africa to remarkably successful Madagascar. Authors of the case studies emphasize the threats of warfare, civil disorder, and development, and recognize the importance of international conservation organizations and committed individuals. Chapters on Latin America highlight the challenges of establishing a network of protected areas in Brazilian Amazonia, the immediate need for conservation policy and legislation, and the conflicts between local resource users and park enforcement, where alternative economic opportunities are limited. Costa Rica's national park system stands out as an economic and social success, but it is seen as an ecological stopgap measure. Case studies from Asia explore Nagarhole National Park in India; the Leuser Ecosystem in Sumatra; and protected areas in Indonesia, Thailand, and Bhutan.

Part 3 includes a diverse series of chapters that cover important themes aimed specifically at addressing conservation concerns and management strategies at the level of individual parks and at national and international levels. One chapter provides recommendations on how to mitigate human and wildlife conflicts. Another focuses on the challenges of enforcing park regulations, such as the lack of institutional power, inadequate compensation for loss of land or resources, ineffective local guards, and the marginalized status of local residents. Other chapters in this part discuss the impacts of resource extraction by human residents in parks and suggest ways to improve and promote ecotourism activities both as an economic resource and as an opportunity to educate locals and tourists. The involvement of the private sector, anarchy in parks, international financing, internationalization of nature conservation, and the importance of political will to es-

tablish and manage parks are all explored in the section on national- and international-level themes. The section on general tools includes three disparate chapters on the importance of monitoring, the need for guiding principles that are "general, yet non-trivial" (p. 411), and a discussion of the "frontier model" of development.

The book concludes by discussing the appropriate kinds of protected areas for a variety of social situations and reiterating the major themes of the book. According to the authors, biodiversity protection looks promising in the near future if nations follow a modernist development model.

As a group of graduate students, postdoctoral students, and faculty members, we brought to this review a diversity of experiences and attitudes toward protected areas in the tropics. Our areas of expertise include conservation biology, sociology, anthropology, ecology, and political ecology. Our group includes proponents and critics of traditional protected areas. Consequently, the book sparked interesting discussions and provided a useful framework for an interdisciplinary discussion about parks and protected areas around the world.

We found that the regional chapters show geographic breadth, are informative, and demonstrate the need for short-term conservation action. Many of the lessons from these examples are useful (e.g., communicating with local communities from the outset, establishing economic ties through tourism projects, and training nationals who then become invested in the park). The authors of the case studies draw on deep and intimate knowledge of the study areas and highlight particularities of each park and country. This allows the reader to gain a sense of the array of issues involved in park management, including enforcement, public support, political alliances, ecotourism, and poaching.

*Making Parks Work* covers several specific topics that are useful as well, such as conflicts between establishing new parks versus existing well-

managed parks, the role of the private sector in establishing parks and protecting biodiversity, and the possibility that periods of instability could lead to new structures that could help conserve biodiversity. We appreciated the inclusion of many different kinds of parks (e.g., private parks, biosphere reserves, and national protected areas).

Given the book's intended audience, however, we expected more attention to concrete suggestions for people trying to make parks work in the field. Most of the case studies do not contain enough depth to be directly applicable to management strategies, and the sparse linkages among chapters make it difficult to compose meaningful generalizations. From a biological point of view, there is not enough information to support the broad statements made by many of the contributors. Key definitions of terms such as *parks*, *ICDPs*, and *success* shift among chapters, making it difficult to compare across case studies. Most importantly, we believe that the book needed more attention to big-picture conservation—the purpose of parks and how they fit into conservation on a landscape or global scale, given the unavoidable fact that parks cannot protect adequately all biodiversity. Addressing these issues with a more concrete and uniform approach would have made the case studies more useful to field practitioners.

The chapter authors stress the need for creating parks to conserve biodiversity while recognizing the role of social, political, and ecological factors beyond park boundaries. But these authors seem to presume an audience already sympathetic to a traditional approach of strictly protected parks. Whereas such an assumption might have been tenable two or three decades ago, this book emerges in a very different context in which many of its premises have been subject to extensive critique. The book does not deal substantively with these competing perspectives. This issue is

true of both the academic critiques of wilderness and protected areas as well as their application in the ICDP approach. For example, most chapters simply write off ICDPs as a failure, but the book contains no detailed evaluation of the actual effects of ICDPs on biodiversity on which to base this claim. Likewise, the dismissal of the critique that parks are culturally imperialistic overlooks a serious concern that reoccurs throughout the book in the guise of unruly locals, corrupt authorities, and insecure financial resources. Without recognizing the inequities rooted in the violent and exploitative experiences of colonialism, as well as the inequities produced by free-trade policies and liberalized international investment, it is difficult to imagine a productive dialogue about the challenges facing international conservation. Although the contributors may not agree with the critics of traditional park models, they need to take those criticisms seriously to participate effectively in current debates on protected areas management.

Perhaps part of the problem is that many of the debates at the park-development interface have been situated in the social sciences, a discipline not well represented among the book's contributors. The notable dearth of social scientist contributors, especially among the editors, engenders problems when the book applies social-science-based concepts, such as development, culture, enforcement, and urbanization, in ways that suggest a lack of familiarity with current scholarship in these areas.

For example, the view that "the world is a free and open marketplace of cultural values" (p. 9) obscures the substantial inequalities of power and resources involved in these cultural exchanges. Another notable example is the recurring use of a "frontier-crisis-stable land use" model of development (see especially chapter 30). According to this model, nations inevitably degrade natural resources until a "crisis stage." Developed nations historically responded

to this crisis by urbanizing and intensifying land use, which resulted in conservation gains. The authors suggest that developing nations can avert this "law-like progression" (p. 426) by promoting urbanization and intensive land use. Unfortunately, these policy proposals make troubling assumptions about the causal mechanisms that allowed developed nations to establish more efficient land uses. The development trajectory taken by developed nations was fostered by colonial relationships that allowed a base of wealth to be accumulated, subsequently allowing these nations to rely less on domestic natural resources and more on resources from the developing world. The developing world will not have similar opportunities, making policies founded on the model tenuous at best. Furthermore, the suggested policies contradict the social and environmental externalities of rapid urbanization and intensive agriculture that the authors suggest will hinder conservation success and stable land use. Accepting these policies as a desirable means to development supports a vision of development that may counter the goals of conservation.

*Making Parks Work* would have been improved by better integration of examples, critique, and solutions. Case studies and discussion of themes provide a helpful foundation but would have been more effective if there had been stronger linkages across parts of the book. For instance, the "Themes" part of the book would have been richer had it drawn explicitly on the detailed case studies described in the book's second part. Even the concluding chapter by the editors makes no reference to the 13 case studies and makes minimal reference to other sections. In addition, the book would have been strengthened by a more direct treatment of conflicting points of view. A noteworthy exception is one of the concluding chapters by Brandon, which provides a rich example of how acknowledging and addressing opposing views can both enhance effective-

ness of the analysis and provide a jumping-off point for important future work. The overall contribution of Brandon's chapter illustrates that despite the book's deficiencies, *Making Parks Work* clearly points to the need for more direct cooperation and collaboration between natural and social scientists in developing effective approaches to biodiversity conservation in protected areas.

#### CentTREAD Working Group\*

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\*The CenTREAD Working Group (part of the Center for Tropical Research in Ecology, Agriculture, and Development at the University of California Santa Cruz; <http://centread.ucsc.edu>) is a diverse group of scholars from the natural sciences, the social sciences, and interdisciplinary studies. We have research interests in tropical conservation and a range of experiences working with parks and protected areas. Participants in developing this review included B. Ayala-Orozco, J. Barsimantov, D. Bevington, E. Blavascunas, M. Bonilla, R. Cole, R. Cohen, G. S. Gilbert, K. D. Holl, R. Huffit, S. Langridge, M. Moritz, D. Mulvaney, J. O'Leary, L. Pejchar, A. E. Racelis, and J. Ward.

#### More than a Conservation Assessment

**Terrestrial Ecoregions of the Indo-Pacific: A Conservation Assessment.** Wikramanayake, E., E. Dinerstein, C. J. Loucks, D. M. Olson, J. Morrison, J. Lamoreux, M. McKnight, and P. Hedao. 2002. Island Press, Washington, D.C. 824 pp. \$85 (paperback). ISBN 1-55963-923-7.

A significant part of the Earth's biodiversity is contained in the Indo-Pacific region, extending from the Indian subcontinent to New Guinea and Melanesia, including southern Asia and Southeast Asia. The area includes 5 bioregions, 140 ecoregions, and 6 of the 25 global hotspots of biodiversity. In our efforts to conserve global biodiversity, then, few areas are as important as the Indo-Pacific region.

This volume by Wikramanayake et al. is more than a conservation assessment. The material in the book covers almost all issues relevant to the development of a conservation strategy. Thus, there are chapters on the distribution of biodiversity, threats to biodiversity, priorities for conservation, and approaches to conservation. Twenty-two essays by such notables as Tony Witten, John Seidensticker, Jason Clay, John Robinson, Judy Mills, and Kathy MacKinnon, among others, are interspersed throughout the book. The essays cover a wide range of topics such as limestone biodiversity, tiger protection, direct payments for conservation, and integration of community concerns into conservation actions.

The unique feature of this book is the information about the spatial distribution of biodiversity and the potential threats to biodiversity. The volume contains a diverse array of maps showing the distribution of ecoregions, major biomes, and endemic species of selected groups of animals and plants and other aspects of biodiversity. Priorities for conservation are then defined on the basis of spatial data, the uniqueness of habitats and biota, and the vulnerability of habitats to anthropogenic pressures. A notable feature is a section on methods to assess conservation status of ecoregions and biological distinctiveness of ecological communities.

Like many others, I love maps. In this book two of my few complaints are that the maps are cluttered with details and that the detailed inlays of the maps are not very clear. I would have preferred fewer but clearer maps. Although the essays constitute a strength of the book, they are often awkwardly placed, which interrupts the flow of the main contents of the volume.

Overall, however, this is a great book about an important region of the world. The wealth of materials brought together by the editors and the essay authors will greatly benefit the conservation community in the region. The volume is a part of a se-

ries on the major ecoregions of the world and the set, once completed, should find a place on the shelves of most conservation professionals.

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### Human Dimensions . . . and then Some

**Forest Futures. Science, Politics, and Policy for the Next Century.** Arabas, K., and J. Bowersox, editors. 2004. Rowman & Littlefield Publishing, Lanham, MD. 393 pp. (351 + xlii). \$29.95 (paperback). ISBN 0-7425-3135-X.

*Forest Futures* is a good new primer for use as required reading in forest policy courses (as mandated by the Society of American Foresters accreditation committee) and especially as supplemental reading for conservation biologists who might believe their predominantly biology backgrounds will get them far in arguing for more effective forest management planning. The editors deserve compliments for succeeding in the nontrivial challenge of making a coherent, readable book out of presentations and manuscripts submitted to a September 2002 Forest Futures Conference held at Willamette University (Oregon, U.S.A.). Thankfully, contributors from the social sciences seem to have listened to and/or read the presentations by biologists, foresters, and economists. The converse is not obvious. As is all too common in conferences and edited books, participants either do not know of contributions by others or simply ignore them.

*Forest Futures* focuses on the now 25-year effort to avoid a fire-sale liquidation of the only storehouse of post-Pleistocene coevolved old growth in the lower 48 United States, namely the highly diverse and gigantic conifer forests of the Pacific Northwest. Ostensibly, the 25 mil-

lion acre inventory of public forest lands that veneer the Cascades and coastal mountain ranges from Puget Sound south to San Francisco Bay is treated in this volume. But preponderant reference to Oregon lands and environmental planning belies the proposition. The editors succeed with up-front coverage of how the text is organized and why the various sections and chapters occur as they do. Hence, 10 years before the current Bush administration, the Forest Ecosystem Management Assessment Team (FEMAT) was established pursuant to the Forest Summit held in Portland. A Northwest Forest Plan (NWFP) that hopefully would guide forest management activities on 24 million acres of public forests was mandated. Because Jack Ward Thomas played a prominent role in U.S. Forest Service research, management planning, and administration, he presents a catbird synopsis of this short history. An objective of the book is to not only to review successes and failures of the NWFP but also to attempt a review of its impact on U.S. federal forest policy. One small subheading, "Understanding the Primacy of Politics" pretty well captures the message of this turn-of-the-twenty-first-century assessment of U.S. public forest policy. It is also probably true that stakeholders will vie with shareholders even on similar corporate forest lands from here on out.

Organized around three themes—sustainability, the role of science in forest policy formulation, and endangered species protection—the book suggests large differences in our relative strength at addressing them. To me, however, the book fails to say much that pertains to sustainability; treatment of endangered species protection is modest. The strength and relevance of this book pivots on the role of science (or lack thereof) in forest policy formulation.

Twenty authors or coauthors present 18 chapters. Thankfully the approximately 350 literature citations are amalgamated in a single section at

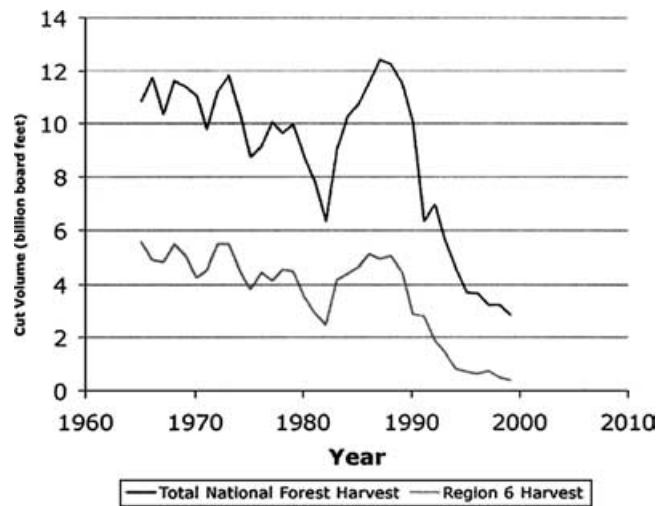


Figure 1. Timber harvests for all U.S. national forests and for Region 6 (Oregon and Washington), 1965–1999. The low point in early 1980s was caused by recession followed by a period of accelerated harvests during the Reagan and George H. W. Bush administrations.

the end. Small but useful tabulations define relevant terms, acronyms, legislation, and court cases. Less than a handful of references predate the last couple decades; something I dislike, but that readers of this journal will most likely revel in (is this the new standard?). Forestry and wildlife, especially federal, is afflicted with what Professor Richard Taber once noted to be the curse of gray literature, including myriad quasi books published at agency behest and taxpayer expense. God forbid anyone in Nairobi or Nicaragua might try to access these tomes.

Disciplinary expertise of the contributors is given at the end of the book, which is frustrating as readers attempt to associate textual facts, ideas, and concepts with expertise and affiliation of authors. Although the text is more balanced between biological and physical sciences on one hand and political science and policy on the other, at face the offerings of traditional disciplines of fish and wildlife conservation, water, recreation, and forestry are anemic.

Although only a few chapters are so good as to be remembered long (e.g., David Perry's synopsis of "Ecological Realities" and Jack Thomas' "Northwest Forest Plan," still to be tested), the all-too-short contribu-

tions by Bob Pepperman Taylor ("Sustainability and Public Values" and "Science, Scientists, and The Policy Process") and by the quartet of Ronald Mitchell, William C. Clark, David Cash, and Frank Alcock are original and creative. Fred Swanson, trained in geology and contributor to landscape ecology, eschews the opportunity to speak to these strengths and tackles the larger topic of "Roles of Scientists in Forestry Policy and Management." One concludes from the frustration implicit in Thomas' epistle and Swanson's graduated roles for scientists—(1) report, (2) report and interpret, (3) work with others to integrate, (4) advocate, and/or (5) make decisions—that the only frustration-free contribution for conservation biologists, *sensu stricto*, best be limited to reporting results of their research.

A quarter century has passed since Jerry Franklin invited and Jack Thomas facilitated a small project resulting in *The Fragmented Forest* (Harris 1984). Events now in the past were then far in the future. At that time the use of a decision-making approach and concept-oriented strategy seemed useful. Now it appears that traditionalists have reasserted the emptiness of their disciplines. Although less frustrating than dealing

with professional foresters, contending with traditional wildlife biologists was then and remains a challenge unto itself. Beg as we may for innovative applications of economics, I know of none. Forest economists remain away without leave and, surely, professional foresters must be aghast at their diminishing role.

Turn of the twentieth-century wildlife conservationists found that they had to take markets and money out of killing to make headway in conservation; foresters did not (Fig. 1).

Cynics suggest that elk hunting and wilderness hiking are comparable to logging insofar as all three constitute legislated uses of our national forests. But I suspect that until water quality and quantity are sold in a free-market system (it has high per gallon value in Nevada, for example) or until only recreational logging is allowed, we will be plagued by asymmetrical values, costs, and revenues. We all wish for the day that a private sector initiative will kick in and help us "get big government off our backs." I simply do not see it happening. Even though President Richard Nixon was outspoken in his support of free trade, and even though he did much for conservation, to this day we must live with government-subsidized sugar production in the

Everglades and timber production on public-land forests.

One hopes, in a book such as this, that regional analysis might contribute both an Oregon outlook and a global vision. I don't see it. Although not bursting with new paths to a better future, many good notions are revealed. For example, why should responsible government not treat wild-fire catastrophes in the same way that modern Florida builders must build against hurricane disaster or the way in which Californians must

build against the certainty of future earthquakes? A stitch in time saves nine. But blessed with infinite taxpayer dollars to put "bad" fires out rather than even trivial amounts to put "good" fires in, we will no doubt continue with the status quo. Surely, if humans are wise enough to manage prescribed fire to put all manner of humanity (and toys) into space, we can harness the use of fire in our forests. Would not the use of fire and innovative economics go a long way toward conserving the evolutionary

products of biodiversity and biophenomena?

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**Emulating Natural Forest Disturbances. Concepts and Applications.** Perera, A. H., L. J. Buse, and M. G. Weber, editors. 2004. Columbia University Press, New York. 334 pp. (315 + xix) \$74.50 (hardcover). ISBN 0-231-12916-5.

**Evolutionary Conservation Biology.** Ferrière, R., U. Dieckmann, and D. Couvet, editors. 2004. Cambridge University Press, New York. 444 pp. (428 + xvi). \$95.00 (hardcover). ISBN 0-521-82700-0.

**Experimental Approaches to Conservation Biology.** Gordon, M. S., and S. M. Bartol, editors. 2004. University of California Press, Berkeley. 358 pp. (343 + xv) \$75.00 (hardcover). ISBN 0-520-24024-3.

**Getting Biodiversity Projects to Work. Towards More Effective Conservation and Development.** McShane, T. O., and M. P. Wells, editors. 2004. Columbia University Press, New York. 470 pp. (442 + xviii). \$79.95 (hardcover). ISBN 0-231-12764-2. \$42.50 (paperback). ISBN 0-231-12765-0.

**Prehistoric Native Americans and Ecological Change. Human Ecosystems in Eastern North America since the Pleistocene.** Delcourt, P. A., and H. R. Delcourt. 2004. Cambridge University Press, West Nyack, NY. 213 pp. (203 + x). \$90.00 (hardcover). ISBN 0-521-66270-2.

**Rehabilitation and Restoration of Degraded Forests.** Lamb, D., and D. Gilmour.

2003. International Union for Conservation of Nature and Natural Resources, Gland, Switzerland. 112 pp. (110 + ii). \$24.00 (paperback). ISBN 2-8317-0744-7.

**Rewilding North America. A Vision for Conservation in the 21st Century.** Foreman, D. 2004. Island Press, Washington, D.C. 295 pp. \$50.00 (hardcover). ISBN 1-55963-060-4. \$25.00 (paperback). ISBN 1-55963-061-2.

**Tropical Diversity and Dynamism. Findings from a Large-Scale Plot Network.** Losos, E. C., and E. G. Leigh Jr., editors. 2004. The University of Chicago Press, Chicago. 658 pp. (645 + xiii). \$38.00 (paperback). ISBN 0-226-49346-6.

**Wild Solutions. How Biodiversity Is Money in the Bank.** Beattie, A., and P. R. Ehrlich. 2004. 2nd edition. Yale University Press, New Haven, CT. 273 pp. (261 + xii). \$16.00 (paperback). ISBN 0-300-10506-1.

