

Publications

Collaborative Governance of Tropical Landscapes edited By Carol J. Pierce Colfer and Jean-Laurent Pfund (2010), 304 pp., Earthscan, London, UK. ISBN 9781849711777 (hbk), GBP 60.00.

I'm not sure quite what I expected from this publication with the lofty title of *Collaborative Governance of Tropical Landscapes* but this collection of in-depth case studies and analyses by researchers from the Centre for International Forest Research (CIFOR) and their partners is full of surprises. It commences with an evocative imagining of journeys through the places studied, illustrating the profound relationship between the land and the people whose livelihoods shape, and are shaped by, these landscapes.

The introductory chapter sets the tone for the rest of the book with its remarkably frank account of the divergence between what the research teams had planned to do and what they were able to achieve in practice. The core of the book covers selected governance-related topics to illustrate each site's particular characteristics while addressing issues with broader applicability.

One chapter examines the role of district government in managing landscape dynamics and livelihoods development in Jambi district of Sumatra, Indonesia. A subsequent chapter unpacks the complex issues arising from two very different examples of displacement: direct resettlement from areas bordering a national park in Laos; and economic displacement in the East Usambara Mountains in Tanzania. The Madagascar and Tanzanian case studies in particular yield interesting insights into the place of customary forest governance systems and institutions in the 21st century.

An exploration of the role of wild species concludes that despite the fact that many species of megafauna are reported to have strong cultural or religious beliefs attached to them, the ability of such values to shape contemporary governance practice remains largely unproven. The Cameroon case study examines the governance of value chains for non-timber forest products, clearly illustrating the economic and other links between even remote areas and the wider world in this era of globalization.

For readers with a particular interest in any of the landscapes studied, as I have for Indonesia, the research presented provides a fascinating picture of the complex, multi-level governance processes that play out in each of the local contexts. There is, however,

also some more pragmatic content with wider relevance, including the presentation of a simple method for assessing governance indicators in forest landscapes and the benefits and challenges of applying such a tool in one of the case study sites.

The importance of taking a multi-disciplinary approach, of spending significant periods of time within the studied landscapes and communities, of recognizing and responding to the complexity of different contexts, are all stressed throughout the book. The humanity of the researchers shines clearly through both in their use of language and in their obvious empathy for the communities whose lives they have touched in the course of their work. References to 'wicked problems' (as defined in Wikipedia), to 'minefields in collaborative governance', and to the necessity of 'muddling through' all illustrate that these are researchers grounded in messy reality, rather than academics preaching from their ivory towers.

Of particular note for me is the ethical dilemma expressed by the authors of promoting collaborative governance systems that seek to bring closer to the state, communities who have, in many cases, maintained their cultural identity precisely because they have remained largely outside state control. If I was seeking to end on a pessimistic point, I could highlight the fact that the section entitled *The Bad News* in the final chapter is twice as long as that entitled *The Somewhat Good News*. But at the end of the day, I'm left with a feeling of at least partial optimism that there are people out there undertaking rigorous multi-disciplinary research, and supporting adaptive learning and collaborative management, with a genuine commitment to maintaining our planet's rich biodiversity in a way that also protects people's livelihoods and socio-cultural well-being.

HELEN SCHNEIDER *Fauna & Flora International*, Jupiter House, Station Road, Cambridge, CB1 2JD, UK
E-mail helen.schneider@fauna-flora.org

Climate Savvy: Adapting Conservation and Resource Management to a Changing World. By Lara J. Hansen and Jennifer R. Hoffman (2011), x + 245 pp., Island Press, Washington D.C. ISBN 978-1-59726-685-7 (hbk); 1-59726-685-X (pbk).

Climate change was recognized as one of the five major drivers of degradation in biodiversity and ecosystems in the 2005 Millennium Ecosystem Assessment, and the 1992 UN Framework Convention on Climate Change recognized its profound implications for human well-being. The two main responses to climate change are mitigation (roughly speaking, reducing the emission of greenhouse gasses such as carbon dioxide and methane) and adaptation (again roughly speaking, developing management, engineering and behavioural responses to the coming changes). While most of the effort and financial investment to date has gone into mitigation, the results have been deeply disappointing and the periodic reports from the Intergovernmental Panel on Climate Change (IPCC) have been increasingly alarming about the growth of greenhouse gas emissions. It is hard to ignore the growing evidence of their impacts, judging from the rate of extreme weather events, melting polar icecaps, retreating glaciers, melting permafrost, changing breeding seasons, increasing acidification of the oceans, and so forth, but viable mitigation solutions remain elusive.

Alternatives to fossil fuels such as the various forms of renewable energy (wind, solar, biofuels, hydro, tidal, geothermal) all carry varying degrees of negative impacts on the world's ecosystems. This leaves conservation and energy efficiency as the most reasonable responses, though they are insufficient by themselves to address the problems of climate change or energy consumption. Sadly, neither governments nor the general public seem willing to take the necessary painful step of reducing dependence on carbon-emitting fossil fuels, even while recognizing that their supply is ultimately non-renewable and their effects on climate will change both ecosystems and the course of human civilization.

While efforts at mitigation must continue, despite their frustrations, it is long past time to accelerate plans for adapting to the climate changes that seem inevitable, and to implement at least some of these plans. *Climate Savvy* is a good recipe book for helping resource managers start adapting to the coming changes, however uncertain these changes may be at any particular site. It starts with a brief introduction to climate change and its relevance to natural resource management, emphasizing the point that new approaches will be required. The remainder of the book is divided into three main parts. Part 1 devotes four chapters to building adaptation

plans, including useful advice on how to buy time, assessing vulnerability to climate change, developing strategies to reduce vulnerability, and emphasizing the role of models and technology. Part 2 has five chapters on taking action, including strengthening protected areas, addressing the needs of species, the role of connectivity in the landscape, habitat restoration, and dealing with the problem of invasive species. These are mainstream conservation actions familiar to resource managers but here seen through the lens of climate change. Part 3 has four chapters on governance issues, including regulating harvest of energy, regulating pollutants, integrating the needs of nature and people, and adapting governance for change. Again, much of this is familiar ground for readers of this journal but enriched with climate change concerns added to the usual responses.

The Afterword contains some additional useful advice, presented in a semi-light-hearted way that is very welcome after a fairly depressing prognosis of the impacts of climate change, using headings borrowed from a renowned American philosopher, including: 'The future ain't what it used to be', 'When you come to a fork in the road, take it', 'You can observe a lot by just watching', 'We make too many wrong mistakes', 'If you don't know where you're going, you might not get there', 'If the world was perfect, it wouldn't be', and 'It ain't over 'til it's over.'

Most of the book's prescriptions are sensible and would be useful advice for resource managers even if climate change were not such a worrying concern. For individuals working in conservation this is an excellent and balanced discussion of the kinds of climate-related issues they are likely to face in the coming years. But some minor problems creep in: some suggested approaches to adaptation are in fact more like mitigation (e.g. 'reduce the rate and extent of local and regional climate change'); the discussion of the Amazon Basin should have mentioned that while this vast forest may support its own climate, in some recent drought years it has been a net producer of carbon dioxide rather than a carbon sink; more advice on converting knowledge about rates of change into action to address these would have been useful; and more citations would be helpful (for example, the alleged case in which a World Health Organization van was burned in an Indian village because its caduceus-like symbol with a snake was despised by villagers).

But the book also has a few more fundamental limitations. Firstly, it defines adaptation in solely human terms, explicitly

excluding evolutionary or biological adaptation even though it discusses the latter forms in some detail and says relatively little about how to change human behaviour. Secondly, the book is specifically aimed at resource managers as if they were major players in the climate change issue. Whilst of course everybody must contribute, and maintaining biological diversity is the best insurance for adapting to changing conditions, the most important actors are surely on other stages, and expecting resource managers to 'reduce the rate and extent of global change' (p. 83) or stopping the Chinese from building dams on the upper Mekong River (p. 190) is hardly realistic. Thirdly, the book is written from an American perspective, although with some international examples well integrated throughout; but nowhere does it mention the sad reality in the USA that politics is the key constraint to progress, with one political party, whose name cannot be mentioned, being led by Senators who steadfastly deny even the reality of climate change, much less the need to do anything about it. Fourthly, the book lacks the historical perspective that might have provided important insights about how people have actually adapted to major climate changes throughout history without the wise guidance of resource managers; this provides the 'evolutionary and reverential literature' that the authors say is lacking, instead charging the IPCC of forcing adaptation on us 'almost by edict'. The reality is that both ecosystems and humans will adapt, one way or another; the IPCC is just trying to reduce the pain of doing so. Finally, the book includes humans almost as an afterthought, even though modern resource managers deal with the human dimension on a regular basis, and arguably the most important aspect of climate change for people is that historically it has been accompanied by serious human conflicts, even ones that may be existential when applied to modern conditions.

In short, this is a useful handbook for helping resource managers realize some of the challenges that they will need to address in the coming years. The readers of this journal will find it a helpful discussion but, in the end, it feels more like displacement behaviour. It is putting the focus on some of the victims of climate change (species, protected areas, natural habitats) rather than the perpetrators (look in the rear-view mirror of your Land Rover).

JEFFREY A. MCNEELY IUCN, Rue Mauverney 28, 1196 Gland, Switzerland
E-mail jam@iucn.org

Trade-offs in Conservation: Deciding What to Save edited by Nigel Leader-Williams, William M. Adams and Robert J. Smith (2010), xxvi + 398 pp., Wiley-Blackwell, Oxford, UK. ISBN 9781405193832 (pbk), GBP 42.50.

Trade-offs in Conservation is based on a series of presentations at a 2-day Symposium in Conservation Biology hosted by the Zoological Society of London in November 2007. Notwithstanding an impressive list of delegates and contributors I must admit that my first thought on reading this in the Preface was that the book would suffer from the common problems that beset proceedings of meetings: contributors and content are largely dependent on who is available for the meeting, proceedings papers are often rushed and of varying quality, and it can be difficult to achieve a coherent narrative. I'm delighted to say that, in the case of this book, this is emphatically not the case. Either everyone in the world who knows about practical conservation was in London in November 2007 or the editors have done an excellent job in filling in the gaps and ensuring high quality. I suspect the latter.

The book is divided into five parts: I, Current Approaches and Toolkits; II, Influence of Value Systems; III, Economics and Governance; IV, Social and Institutional Constraints; and V, Future challenges. The first section gives examples of conservation dilemmas as applied to decision-making frameworks and methodologies. The authors don't pull any punches and I was particularly interested in the chapter on global hotspots and other prioritization methodologies that seek objectivity but suffer from lack of data, arbitrary cut-offs and, in application, often fail to take into account basic business principles such as cost-effectiveness. The conclusion that proactive conservation is more effective than reactive conservation is hard to argue with. There is also a useful chapter on biodiversity versus ecosystem service approaches, the conclusion being that there are plenty of win-win opportunities even if the two approaches are often not synonymous. The final chapter in this section on defining and measuring success in conservation is a must read wherever you are on the conservation spectrum.

Part two looks at value systems and includes a chapter on evaluating and articulating the importance of invertebrates and other organisms that we regard as creepy rather than cuddly. The second chapter expands on this theme by examining the different perspectives and trade-offs between