

Publications

Conserving and Valuing Ecosystem Services and Biodiversity: Economic, Institutional and Social Challenges. Edited by K. N. Ninan (2009), xxix + 402 pp., Earthscan, London, UK. ISBN 9781844076512 (hbk), GBP 70.00.

Biodiversity conservation is increasingly approached through an ecosystem service 'lens'. Protecting ecosystem services helps not only to conserve biodiversity, with its own intrinsic value, but also influences human well-being. Such an approach has broadened the range of motivation for biodiversity conservation, bringing its value closer to our daily lives. However, despite a general agreement about the potential for ecosystem services to address both conservation and human well-being, there remain considerable challenges in how to value and ultimately protect such services (Sutherland et al., 2009, *Conservation Biology*, 23, 557–567). This compendium of papers highlights some of the economic, institutional and social challenges confronting our ability to conserve ecosystem services successfully.

Conserving and Valuing Ecosystem Services and Biodiversity begins with a strong introductory chapter that provides a broad overview of biodiversity and ecosystem service conservation. In this chapter Ninan includes a harrowing selection of statistics that helps to contextualize the urgency of biodiversity and ecosystem service conservation by drawing on the findings of the 2005 Millennium Ecosystem Assessment. The selective reader can easily determine where to focus based on the summary of the chapters provided.

The book comprises 17 chapters divided into five sections. The first and longest section addresses biodiversity, ecosystem services and valuation in seven chapters,

exploring several broad categories of biodiversity conservation including threatened species, non-timber forest products, and the interface of human use. The second section (incentives and institutions) includes two chapters that describe payment-for-conservation schemes and a third on the behaviour of conservation organizations from a game theory approach. The third section (governance) includes case studies from the UK (coastal wetland ecosystem management), East Africa (cheetah conservation) and Indonesia (NGO involvement in the protection of indigenous rights) that are detailed and provide excellent material for discussion. The fourth section (intellectual property rights and indigenous knowledge) includes a case study from the Philippines and a second more general chapter examining methods to protect traditional knowledge. The final section (climate change, biodiversity and ecosystem services) describes the impacts of climate change on livestock selection in Kenya and coastal regions in Cameroon.

This book is geared towards graduate students and professionals working in biodiversity conservation from a natural science, social science, or economic perspective. The book does not require a background in economic valuation techniques but it certainly enhances the reader's overall comprehension of such techniques. Chapters vary in their accessibility, with some providing a level of detail that is sometimes tedious but enables replication in other studies (Chapters 6, 7, 10 & 12), whereas others present a more general overview of challenges pertaining to a specified area (Chapters 2, 4 & 15).

The book has an impressive array of authors; leading experts in their field who have made significant contributions to biodiversity research and policy. The expertise

of authors is evident in the level of detail describing the complexities of institutional relationships and the challenges these relationships pose to valuing biodiversity and ecosystem services. This said, I would have appreciated more on potential avenues for resolution of the challenges described. For example, Perrings (Chapter 4) adroitly illustrates the complexities involved in biodiversity conservation in international waters, positing that a critical step in resolving the conservation challenges 'depends on the introduction of access charges that reflect the user cost of the resource.' I would have been interested to read more about how an accurate portrayal of user cost might be achieved.

Conserving and Valuing Ecosystem Services and Biodiversity is a moderately accessible book albeit not an easy read. The range of papers is diverse, representing several countries, ecosystems and applications of environmental economics, but suffers from poor cohesion between the sections and chapters. I admire the work achieved by the contributors and consider the book an excellent resource for stimulating discussion (perhaps in graduate level seminars). Furthermore the book will undoubtedly encourage individuals from a more traditional natural science background to think from a perspective atypical of their discipline. However, I felt that the full potential of the volume could have been better realized by including brief introductions to each section, encouraging the authors to cross-cite one another, and including a final synthesis chapter highlighting the challenges and contributions made.

NICOLE D. GROSS-CAMP *International Development, University of East Anglia, Norwich, NR4 7TJ, UK. E-mail n.gross-camp@uea.ac.uk*