

components of an ecosystem are evaluated together and trade-offs in management are explicit. This is a large deviation from the traditional single-species or single-sector management approach that has been the status quo in marine systems. One chapter in this section, Valuing Ecosystem Services, addresses a challenging aspect of practising EBM: how to integrate ecological processes and services with economic valuation. Several approaches to natural resource valuation are reviewed but the reader is reminded that 'economic analysis of ecosystem services has a long way to go' to effectively support EBM practices.

The third section addresses how to transition from the concepts discussed in the earlier sections to actually practising EBM. This group of chapters focuses on how to apply the principles of EBM. Valuation challenges are addressed again, with Edward Barbier discussing the difficulties in assessing trade-offs in ecosystem services throughout chapter 8. A chapter on integrating traditional ecological knowledge is a welcome departure from the quantitative methods and applications in most of the contributions. While quantitative modelling plays an important role in management, incorporation of qualitative data, such as the inclusion of traditional ecological knowledge, is also important to EBM. Issues raised in earlier chapters are addressed in chapter 10, which focuses on building the necessary legal and institutional frameworks. Current US governance structures that support EBM are reviewed, including the Magnuson-Stevens Act, but the authors point out that the current system is resistant to change. One of their suggestions to improve EBM practice in the USA is to link governance scales better to allow for overlapping institutions and shared authority.

The book's fourth section is dedicated to chapters reviewing EBM in practice. These case studies include: Morro Bay, California; Puget Sound, Washington; Chesapeake Bay, Maryland; Gulf of California, Mexico; and Eastern Scotian Shelf, Canada. Chapter 16 is a nice summary of how EBM is being implemented by different governments.

Two summary chapters in the fifth section address how to move forward. A philosophical piece asks readers to question the moral and ethical viewpoints that have led to our current ecological crisis. The authors suggest what a future ocean ethic, one that better supports EBM, could look like. In a reciprocal fashion, they also suggest that EBM may help us discover this new ethic, such that EBM is both a means and an end. McLeod and Leslie synthesize the book in chapter 19, reminding the reader that,

although achieving EBM may appear to be a daunting goal, there are several paths one can take. If EBM should, in fact, be a global goal, it can be implemented in various manners across the marine environment.

Although comprehensive in most regards the major limitation of this book is its lack of relevance to developing countries. Almost every chapter relates to studies and resource management issues directly relevant to developed countries, and especially the USA. However, EBM may be even more important in developing countries, where populations are often critically dependent on their natural resources.

The contributors and editors have done a good job integrating and synthesizing the chapters. Many chapters reference other contributions in the book. Overall, this book is a valuable resource for managers, scientists, and conservationists. It addresses everything from conceptualizing and planning EBM to implementation and evaluation.

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Assessing the Conservation Value of Fresh Waters edited by Philip J. Boon and Catherine M. Pringle (2009), x + 293 pp., Cambridge University Press, Cambridge, UK. ISBN 9780521848855 (hbk), GBP 75/USD 150; 9780521613224 (pbk), GBP 35.00/USD 70.

Covering only c. 0.8% of Earth's surface, freshwater habitats are home to almost 45% of all fish species, 25% of all mollusc species, and harbour a relatively high species density compared to the terrestrial and marine environments. Given the wealth of biodiversity associated with freshwater environments, how does one go about identifying and assessing the values of freshwater ecosystems, habitats and species for conservation? This challenging question is the focus of this book, edited by P.J. Boon and C.M. Pringle, a UK freshwater policy advisor and a US professor of freshwater research, respectively. The editors contribute a number of chapters and there is input from 17 other authors. The assessment of conservation value is a pressing and contentious issue and the book provides a good overview of various approaches, both legislative and scientific.

One strength of the book is that each of Chapters 2–8 is co-authored by a pair of authors, one each from the UK and USA. This format allows careful comparisons of

the approaches used in both countries. These chapters cover a number of key topics, including relevant legislative frameworks, underpinning philosophies, approaches for prioritizing freshwater values for conservation, responses to threats to freshwater biodiversity (including case studies), approaches for evaluating restoration potential, and approaches for assessing river and lake conservation values. Note that the book covers issues related only to lakes and rivers and does not specifically cover the assessment of conservation values of other freshwater ecosystems such as ponds or wetlands.

In Chapter 2 the results of a survey conducted by the editors are presented in which a number of freshwater specialists were asked to score various attributes (e.g. naturalness, rarity, diversity) as indicators of freshwater conservation value. Results were analysed by country (UK vs USA) and by professional grouping (researchers from universities and research institutes vs people working in conservation bodies vs river/lake/land managers and environmental regulators) for rivers and lakes, separately. Some patterns emerged from the data and, among other conclusions, the authors interpreted their results as indicating that the traditionally accepted criteria of naturalness, rarity, diversity and representativeness accurately summarize a general perception of freshwater conservation value.

To extend the scope of the book geographically and culturally interesting summaries of approaches used in Sweden, Australia and New Zealand, South Africa and in some developing countries are presented in Chapters 9–12. A sense of the urgency of freshwater conservation is generally communicated only in the latter chapters dealing with developing countries and Australia and New Zealand. The reader could be lulled into a false sense of security by chapters 2–9 as the complex legislative and scientific approaches employed in the UK, USA and Sweden are generally succeeding in conservation of freshwater biodiversity and ecosystems.

This book does not give the reader a sense of the great challenges that persist for freshwater conservation in the developed world, nor does it signal an emerging consensus or pathway that could lead to greater success in conserving freshwater species, habitats and ecosystems. Perhaps the authors will follow this book with one that analyses which approaches work best and which approaches have not worked. On the other hand, perhaps different approaches are needed to suit different cultural, historical and ecological circumstances and, thus,

there is no single approach that works across a wide range of cultures and ecologies.

This little book covers a lot of ground, provides a broad overview of the topic, and is a well organized access point to a range of literature dealing with legislative and scientific approaches to assessing freshwater conservation. It is a valuable, up-to-date summary of some of the complex scientific and legislative issues in freshwater conservation currently being played out in many countries around the world.

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Places: Linking Nature, Culture, and Planning

by J. Gordon Nelson and Patrick L. Lawrence (2009), 520 pp., University of Calgary Press, Calgary, Canada. ISBN 9781552382547 (pbk), CAD 44.95.

This book arrived on my desk towards the end of last year like an early Christmas present: encased in a colourful cover and pleasingly weighty. Scanning the flyleaf, I learnt that this is the first of a new series promising to 'explore how we live and work with each other on the planet, how we use its resources, and the issues and events that shape our thinking on energy, ecology and the environment'. In particular, the aim of the series is to showcase the experience of researchers from Alberta, Canada.

This first publication in the series is essentially a collection of papers covering 4 decades of research that contributed to the

development of something referred to as the 'ABC method'. Its fundamental premise is that a holistic approach, integrating geology and earth sciences (Abiotic), plant and animal communities (Biotic) and land use, institutions and other social (Cultural) information, is necessary to understand any particular location or 'sense of place'. As a committed multi-disciplinarian myself, I was intrigued enough to delve further into what is a dense and hefty academic tome.

To help guide the reader there are several pointers early on, with chapters giving an overview and history of the ABC approach and a summary of how the book is structured—essentially a series of previously published case studies, loosely categorized as detailed analytical studies, focused summaries of detailed studies, comprehensive overviews and assessments, and rapid reconnaissance studies. The inclusion of a section entitled Questions for the Reader and some suggested approaches to designing a research project give the impression that the key audience is largely an academic one although the authors express the hope that it will also be useful for planners and other decision-makers.

The case studies are predominately from Canada and the USA but also include some applications of the ABC method to wetland and coastal management issues in Hong Kong and Java, and to the historical landscape of the UK's New Forest. I was particularly interested in the latter, having grown-up in the New Forest and completed my undergraduate thesis on the governance aspects of land use planning in the area. For me, this area has an extremely strong sense of place. Somewhat disappointingly,

this particular case study was one of the rapid reconnaissance studies, based largely on a review of existing literature and a few informal interviews, not really adding much to the body of knowledge on the complex governance issues of this fascinating region.

Overall, the current utility of the research presented here suffers from the age of the studies; even the introductory first chapter is a paper published 20 years ago. In addition, the rather poor reproduction of the numerous, detailed monochrome maps makes the book somewhat dated in this era of sophisticated satellite mapping and geographical information systems.

This volume serves a purpose as a compilation of research papers tracing the development and implementation of a multi-disciplinary method for improving the understanding and management of a range of different places. Given the dense nature of both structure and content, whether it is accessible enough to act as either a practical guide or as a much needed call-to-arms for a more holistic approach to how we see and interact with our world, is still, for me at least, open to question.

To return to the analogy of a Christmas present, this book is like a patchwork quilt lovingly put together by a respected aunt—a mosaic of intricately patterned but slightly faded pieces of material. As such, it may be valued by different people for different reasons: for its historical interest, for the stories it tells, or for its practical utility.

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