

And has Sue interpreted the facts like all *good* historians? Being the last person in the class of '61 to be qualified to do so, I nevertheless opine that some of her interpretations founder, probably because she is less of the Renaissance person necessary for the task. For example, the *Appropriation Act of 1879* is mentioned for alienating vast tracts of uninhabited "barren sandstone country" for water supply catchments, but the consequences of flora and fauna conservation and prevention of mining, soil and water degradation are not. Some other interpretations may be a bit immoderate; such as the expansion of settlement beyond the Hawkesbury-Nepean moat [expanded] the war against nature.

The author has also sneaked in some interpretations for which she presents no historical evidence such as concluding that mining led to "further exploitation of natural resources". While "woe, woe" becomes suspiciously like a Greenie mantra, I am sure it is true nevertheless. Another form of repetition I did like were the gentle summaries at the end of every chapter.

This book contains graphics to give the feel of the times without turning the book into a coffee table compilation except . . . Except I would have liked a map showing *all* the place names that appear in the text, especially as some names have changed with time. And there were a few old technology terms left unexplained: rust in the soil, log foils and macadamising, for instance. Is this unreasonable or is it just the engineer in me coming out?

But every reviewer can criticize what is deemed to be missing from a book; it is a cheap trick because the list can be endless and requires no skill, empathy or understanding on the part of the viewer. The bits I did think were missing probably come from a specialist understanding of certain aspects of the Hawkesbury-Nepean and I am sure every knowledgeable reader will also find bits missing. Read the book and discover yours!

For those of you who remember getting sepia-coloured cards of Sir Sydney-Kidman, John Macarthur and other famous Australian men in your new *Stamina* school uniforms, this book will point out that these worthies were also environmental rapists of the first order. Creditably, the book goes on to indicate that the rapists are now not the few and famous, but the many and mindless; you and me. If the 1960s swamp-dwelling animal cartoon character Pogo had been the one to review this book, he would simply have repeated his aphorism "We have met the enemy, and it is us".

The trouble with a book like *Losing Ground* is that it provokes me to ask "so what are we supposed to do about it? Do we tie the tubes of all teenagers, abandon Sydney, live like the Europeans — six floors deep?" None of this is in the book because the immediate past is as far as Sue Rosen goes. I guess the better the historian of an unpleasant past, the more you will be forced to consider the present and future. If that is what this book does to you, it will have done her job well.

Let me conclude by quoting from a learned engineering paper in the international press: "In March 1993, a [Sydney Water] Board's survey, leaked to the press, reported that only 37% of 603 Hawkesbury-Nepean Catchment residents said that they trusted the Board's information of water quality" (O'Loughlin 1994). Whatever the other strengths or weaknesses of *Losing Ground*, it should be a source of trustworthy information to readers interested in the physical and social health of this large chunk of Sydney.

#### REFERENCE

- O'Loughlin, G. G., 1994. Pollution Prevention and Politics: The Recent Experience in Sydney. *Water Science Technology* 30: 13–22.

## Nature Conservation 4: The Role of Networks

Edited by D. A. Saunders, J. L. Craig and E. M. Matiske.  
Surrey Beatty & Sons, Sydney. 1995. 684 pp.  
ISBN 0 949324 65 5.  
RRP Aud \$128

JULIA PHILLIPS<sup>1</sup>

THE fourth in a series of volumes concerning nature conservation, this most recent addition is the proceedings of an international conference held in Geraldton, Western Australia, November 1994. It adopts the same format as its predecessors with contributed papers presented as individual chapters grouped into a number of main themes. Given that 78 of the 95 oral papers presented are included, *The Role of Networks* provides a comprehensive summary of the conference.

While previous volumes in the series concentrated on biological aspects and principles of conservation, this volume takes the necessary step to widening our approach to nature conservation by including social and

political considerations. The two main themes explored are that networks of people are our conservation force and networks of other organisms are our conservation resource. The latter theme was dealt with in some depth in previous volumes in the series, so the current volume focuses mainly on the importance of wider community involvement in nature conservation.

The opening chapter by Michael Soulé reminds us of the biotic and social fragmentation that has led to the urgent need for nature conservation. The loss of connectivity of habitat remnants combined with the loss of human connectivity with nature is the underlying concern of the book and is reiterated in many subsequent chapters.

In light of the concern, the book makes a timely contribution to issues of how networks of people can be formed, maintained and involved in nature conservation. Most importantly, *The Role of Networks* recognizes that while science supports conservation, it does not drive it. The important role that scientists play

<sup>1</sup>Department of Environmental Management, Edith Cowan University, Joondalup, Western Australia, Australia 6027.

in conservation is not disputed, but the book calls for a change in the way scientists participate in conservation issues. The missing link between government policies and public awareness is the scientist; scientists therefore need to establish this essential link so that information flows freely. To achieve this, scientists must become actively involved in social and political arenas and become more articulate in communicating their research. This is not the first book to express this, but perhaps the first book to synthesize a large number of case studies and models that provide examples on how this can be achieved.

The development and maintenance of networks is addressed in 13 papers, many of which deal with important social considerations. Probably one of the most interesting and innovative papers in this section is that by Schultz (chapter 22) on language and the natural environment. He illustrates how our economically-derived commercial usage of language is often biased towards exploitation of natural resources. Schultz shows how rectification of our choice of terms would considerably improve public perception of the consequences of many land management practices. Another section deals with landcare groups and property owner networks, which are an increasing force in the conservation movement in agricultural areas. It is encouraging to see that one paper is written by a landholder, giving a rare insight into the view of conservation networks and their objectives as seen from a non-scientific perspective.

Other sections cover networks of indigenous people, mining and environmental consultants, agencies, local communities and conservation education. A recurrent theme is ways in which the empowerment of all stakeholders will ensure effective conservation and the papers offer a wide range of approaches to achieving this goal. Several papers also illustrate ways in which communities can be encouraged to accept responsibility for conservation, such as Williams' paper (chapter 36) on the use of flagship species.

Despite the large contingent of papers by Australian authors, the information contained in this book has worldwide application. Notably lacking, however, are papers dealing with marine conservation. This area of conservation typically lacks public support due to the lack of public awareness, not only of the diversity of marine life, but of the current threats to its integrity. Establishing and maintaining networks for marine conservation requires different strategies than those for terrestrial environments.

As with other volumes in the series, the book is extremely well indexed. It provides an excellent compilation of a topical issue in nature conservation and while it is essentially a book written by scientists for scientists, it should have a large audience. The challenge, however, is for the recommendations put forward in the book to be implemented by scientists involved in conservation.

## Platypus and Echidnas

Edited by M. L. Augee, 1992

Royal Zoological Society of New South Wales, Mosman.

Published by Backhuys, The Netherlands.

ISBN 0959995161.

Price on application.

DARREN G. QUIN<sup>1</sup>

*PLATYPUS and Echidnas* presents the proceedings of a conference held at the University of New South Wales in July 1991. *Platypus and Echidnas* incorporates an extensive information source obtained from studies undertaken since the first symposium on "Monotreme Biology" in 1978, while highlighting deficiencies in our knowledge, and subsequently suggests further avenues for research. The theme of evolution re-occurs throughout the publication and the studies demonstrate how patterns of mammalian phylogeny may be derived from various sources including palaeontology, gene mapping, DNA hybridization, reproductive physiology and endocrinology. Interest in this publication will extend to: (i) scholars of phylogeny and evolution especially part 1); (ii) comparative physiologist, physiological ecologists and anatomists (parts 1, 3, 4 and 5); (iii) ecologists and socio-ecologists (parts 3, 5 and 6); (iv) natural historians; (v) keepers of captive wildlife colonies (parts 3 and 6); (vi) wildlife veterinary surgeons (part 6); and (vii) wildlife managers (especially part 6). The book deals primarily with the short-beaked echidna *Tachyglossus aculeatus* and the platypus

*Ornithorhynchus anatinus*, for which most information is available.

The papers in this book provide many valuable comparisons. These include: comparisons between mammalian groups (monotremes, eutherians and marsupials) which provide insights into mammalian origins; comparison between monotreme species; and comparisons between monotremes, birds and reptiles, where for example, similarities and difference in reproductive patterns have been established. Intraspecific comparisons of individuals inhabiting sometimes vastly different environments, and subsequently experiencing different climates, demonstrate the adaptability and broad climatic tolerance of echidnas.

The publication is arranged into six sections: Evolution; The Meiotic Chain; Reproduction; Physiology; the Brain and Electroreception; and Field and Population Studies. The first of these deals with monotreme evolution from the fields of palaeontology, genetic biology and endocrinology. The first two papers introduce fossil forms of platypuses; *Monotrematum* of South America, and *Obdurodon* from the Riversleigh area of Australia. *Monotrematum* represents the first-discovered non-Australian monotreme. The debate about monotreme origins is reviewed using current evidence from each of the above fields. After all, knowledge of mammalian origins is dependent upon understanding the egg-laying branch of the mammalian phylogenetic tree. Although the papers under this

<sup>1</sup>Department of Ecosystem Management, University of New England, Armidale, New South Wales, Australia 2351.