

Conservation Biology in Australia and Oceania

Edited by Craig Moritz and Jiro Kikkawa, 1994.
Surrey Beatty & Sons, Chipping Norton, NSW.
403 pp, 41 Chapters, plus an introduction and epilogue
ISBN 0 949324 48 5.
RRP A\$93.00.

C. L. GROSS¹

FINALLY! The book from the conference has arrived. In 1991 the first conference on Conservation Biology in Australia was held in Queensland. Four years on, my first question about this book was, is this book out of date? Unfortunately, I do not think so. Why is this unfortunate? It is unfortunate because we have advanced very little in the last four years in the conservation and management of the biodiversity in Australasia.

We are at a crisis stage. Habitat destruction and modification and the subsequent loss of biodiversity around the world has many people concerned and thus the discipline of conservation biology is here to stay. The major drawback of this book is that the research contributions of so many excellent scientists in the field of conservation biology are presented in a concentrated form for consumption. I like this approach. From a teaching and research perspective it is a boon to have so many interesting studies at hand.

The book, of just over 400 pages, contains an introduction, 41 chapters, an epilogue and an index. The chapters are organized under three subheadings; *Setting the Scene* (five chapters), *Problems and Prescriptions* (28 chapters) and *A Prospectus for Research and Management in Conservation Biology* (eight chapters). All but one chapter (chapter 5) are focused on conservation issues in Australia and Oceania.

Some of the highlights include the very interesting account by Hopper (pp. 275–276) on the question of hybrids and conservation, the data presented by Kitching on the fascinating diversity of the Arthropoda (p. 256), and the thought provoking account by Chrome on the knowledge base and forest fragmentation (pp. 61–76).

Disappointingly, mundane typographical errors distracted my reading and curiously the articles contain references to material post 1991 indicating that these chapters are not solely based on conference proceedings. Moreover, I am not certain how one cites articles from this book. The title page indicates the book was published in March 1994, but the individual chapters have footnotes suggesting that the articles should be cited as 1993. Most likely 1994 is the correct date for citations to chapters.

Many authors in this book suggest that we need more money, and more knowledge to be predictive. This is now a tedious argument. Yes we need more money in

science and environmental management, but we also need to be prepared to give predictions for management based on the best available information. Chrome (chapter 7) quite rightly points out that natural history needs to be encouraged again. If the general community were encouraged to become natural historians, the general level of interest and knowledge about biodiversity and conservation should be increased. Conservation biology needs to become part of the fabric of society. Unfortunately, the issue of decline of frog abundance and diversity is not addressed in this book. This is one area where the public does have some awareness of the decline of species.

Prescriptions are given on several issues including the need for legislative changes, integrated management, the training of specialists, the establishment of databases, the need for more research, and the need to educate the public about the issues of concern. These are very admirable suggestions, but they are suggestions for scientists largely. The vast majority of consumers in Australia are in the dark about these realms of organization and science. Since this conference, how many of us have been out there broadcasting our research to the public? The real estate developers along coastal Queensland and New South Wales are doing a fine trade — how do we reach them? The politicians have not been able to do so or have not wanted to.

It is the non-scientists, the non-teaching community, the non-conservation minded people that the messages in this book need to get to; the folk who will never know this book exists. How are we going to do that? How are we going to get the message across to all those folks that are dying to retire on the north coast of New South Wales, and who are busy clearing littoral communities, or building on ex-dairy land at Lennox Head that should be rehabilitated as rainforest. The information is there for these people. There are articles in their local newspapers about rare species, there are NPWS offices in Coffs Harbour, Grafton, Lismore and Murwillumbah that they could seek information from, and there are conservation programmes on the television that deal with threatened species and communities, but the message is not getting through. The problem is enormous because the majority do not seem to care and are not concerned for the future. Do we need a massive focus on single issues, such as Kelleher and Lassig (chapter 21) describe with the Crown of Thorns situation, to capture the attention of people? Lamb (chapter 9) has suggestions for raising the awareness of some sections of the community and Pickard (chapter 12) at least notes that the financial well being of graziers is fundamental to conservation. But the real problem may be that too few of the conservation biologists who attended the conference in 1991 take the time to talk to the public and explain the need to conserve biodiversity.

¹Department of Ecosystem Management, University of New England, Armidale, New South Wales, Australia 2351.

I recommend this book to researchers, teachers, politicians and people generally interested in conservation. This is a fine book about conservation issues for scientists, but I am frustrated because I suspect this book is only going to reach the converted. It generally lacks suggestions on how to reach the vast majority of Australasians who do not recognize the urgency of the problem. We must all do what we can to educate the oblivious about the obvious, but immediate laws are required to prevent further habitat destruction.

Saunders (chapter 6) mentions the need to ban clearing of native vegetation, but legislation to control clearing has proven difficult to enact or enforce. We cannot rely on legislation, or more science or hope for a sudden elevation in awareness among people to solve our environmental problems. As conservation biologists, we must become more involved in promoting conservation and educating the community. This book gives us some of the information we need, and some ideas as to how to proceed. It is now up to you.

A Field Guide to Australian Butterflies

Robert Fisher, 1995
Surrey Beatty & Sons, Chipping Norton, NSW.
254 pp, ISBN 0 949324 52 3.
RRP A\$29.95.

DAMON OLIVER¹

ROBERT Fisher believes that an increased awareness about conserving the remaining unique biota of Australia has created a desire in many people to identify and understand the biology of organisms. *A Field Guide to Australian Butterflies* is a useful way to impart such biological information to those who wish to explore the natural world around them. The objective of this field guide is to provide a book of photographs which aid in the identification and appreciation of some two hundred Australian butterfly species, about half of the total described species in this country. The field guide provides a brief but adequate introduction explaining the classification, life histories, morphology and geographic distribution of Australian butterflies. It is then divided into sections corresponding to the six families of butterflies represented in Australia. Each section gives a brief overview of the unique morphological characters, geographic distribution and life cycle of that family. A noteworthy feature of this guide is the inclusion of several pages of excellent photographs of early life stages at the beginning of each family section. Ideally, though, it would have been desirable to have photographs of the early life stages for all species presented, to complement the adult photographs.

There is, however, a description of the non-adult stages for every species, and information about which host plant species these are likely to be found on. This not only helps those who are interested in knowing what species the egg, larval or pupal stage belongs to, but also provides ideas about what plant species to grow in the garden to attract butterflies. The butterfly species presented in the guide were chosen because of their common distribution across the continent. There are also some less common species included to illustrate their exquisite beauty. Amateur entomologists who are unfamiliar with complicated terminology, used by professionals, will find this book easy to use. Only very basic morphological terminology is used to separate the different families and these terms are well defined in the glossary. Identification of species is achieved by referring to the colour photographs of the adult specimens which are generally very clear and well presented. Photographs in the "Swallowtail" family are particularly impressive, inspiring one to journey to the tropics in search of the gorgeous Cooktown Birdwing and Red Bodied Swallowtail. This is a relatively small field guide and there is a ready niche for a slightly larger version which includes all 385 species. The geographic distribution of each species would have been better presented in map form rather than written description. Minor criticisms aside, this field guide is an easy way for amateur and professional naturalists to familiarize themselves with the biology of butterflies. This would be a very good book for budding young entomologists and one would hope to see more field guides of this nature produced for other insect orders in the future.

¹Departments of Ecosystem Management and Zoology, University of New England, Armidale, New South Wales, Australia 2351.