

the waters of fauna conservation". It is sobering to reflect that few Australian forests have been exempt from logging and other disturbances since 1788. The pace of disturbance appears to be increasing as, contrary to prevailing wisdom, as much land was cleared in the 50 years as in the 150 years before 1945 (DEST 1995).

Properly managed logging need pose no threat to the long-term survival of forest wildlife. However, "properly managed" requires a far more sophisticated approach than generally employed by forest managers (Recher, Chapter 2).

I was intrigued by the possibilities of extending standard economic methodology of cost benefit analysis to the valuation of non-use forest values (Hamilton and Glyde, Chapter 4). Contingent evaluation is being increasingly used in the United States, but has yet to see wide applications in Australia. The technique has potential for environmental impact assessment of a wide range of projects including mining and this chapter significantly broadens the appeal of the book.

Just who constitutes the potential audience is problematic. My first thought was that Conservation of Australia's Forest Fauna should be made compulsory reading for every forester and forest policy decision maker in Australia. Leaving aside the Orwellian overtones, the sad fact is that social, (i.e., read economic) imperatives will still colour the reaction of land use

decision makers. Unfortunately, most readers will be the converted. A positive step would be to promote the book as a reference text to students of the natural sciences and resource management.

I was disappointed to note the lack of an Aboriginal dimension. The critique of conservation of archaeological sites in forests hardly suffices (Byrne, Chapter 33). A basic understanding of the impact of Aboriginal management and the interaction with wildlife of traditional lifestyles is essential to the establishment of conservation base lines. Perhaps this issue could be picked up in the next edition?

Indeed, I sincerely hope that there will be a second edition. This collection of papers has values as a benchmark, but the information will quickly become scientifically dated. Without wishing to alarm the poor editor, it would be useful if planning for a future update commenced now. In the meantime, the current edition is highly recommended as a resource text for students, research workers, resource management professionals and policy makers.

## REFERENCES

- Department of Environment Sport and Territories (DEST). 1995. Native vegetation clearance, habitat loss and biodiversity decline. *Biodiversity Series*, paper No. 6, Biodiversity Unit.

# People and Nature Conservation Perspectives on Private Land Use and Endangered Species Recovery

Edited by Andrew Bennett, Gary Backhouse, and Tim Clark.

Transactions of the Royal Zoological Society of NSW.

Surrey Beatty & Sons, Chipping Norton, NSW.

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OVERALL this is a very good book, although I must take umbrage with the title which does not represent the content of the book which is primarily about animals (wildlife) and not animals and plants (nature). This book, then, is about People and Wildlife Conservation.

Each of the 33 chapters represents a paper given during the annual meeting of the Australasian Wildlife Management Society (AWMS) held in Melbourne in 1993. The two symposia held at the conference were; "Implementing Endangered Species Recovery Programmes" and "Wildlife Conservation and Management on Private Land" and the chapters in the book are organized under Case Studies and Policy Initiatives in Endangered Species Recovery in Australia (Chapters 1-14) and Wildlife Conservation and Management on Private Land (Chapters 15-33). There is a slight Victorian bias in the content of the book which reflects that the symposia were held in Victoria.

In Chapter 1, Backhouse and Clark provide a good introduction to Case Studies and Policy Initiatives in endangered species recovery in Australia. The authors provide data on the number of extinct and threatened plants and animals in the Commonwealth followed by a breakdown of the plans available for various animal groups. Recovery Plans are underway in Australia for endangered plant species too, although the authors make no mention of these.

In Chapter 2, Yen and New provide an informative account of the present status of knowledge of conservation of non-marine invertebrates. Recovery plans involving such taxa are too few in Australia and the authors suggest that while single species approaches are likely to be useful in some situations, for the vast majority of invertebrates, consideration of species assemblages and habitats is likely to be a more effective conservation strategy. The authors highlight a major problem facing Australia, namely, that we are suffering from a lack of specialist knowledge of invertebrate taxonomy. This problem has led, in part, to recent attempts at rapid biodiversity-assessment of invertebrates (which, unfortunately, appears to be no more rapid than other methods of invertebrate biodiversity assessment). Yen and New highlight the poor public relations that invertebrates generally experience in Australia and they put forward some examples of how to interest the public in conservation programmes. It occurred to me

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that mosses, ferns and fungi are taxa that pose similar conservation problems because of a general lack of knowledge and interest about them. In Chapter 17, Horne, Short, Van Praagh and Yen continue with the theme of invertebrate conservation with a very informative discussion of the conservation and management of invertebrates on private land.

Chapter 10 by Mansergh, Jelinek and Clunie is titled "A Review of the Action Statement Process under the *Victorian Flora and Fauna Guarantee Act 1988*". These authors provide a fair overview of the Act, its purpose and achievements to date. They provide a good summary of the advantages, areas for improvement and future directions of Action Statements.

Crosthwaite, in Chapter 11, provides a timely reminder that it is important to identify and address the social and economic issues in recovery planning. This may seem obvious but it is still often ignored by conservation managers.

One of the catch-cries often heard from the public is that "We want to do the right thing but we are not sure

what that is?". This book is going some way towards bridging this problem. In particular, Bennett (Chapter 15), Crosthwaite (Chapter 27) and King (Chapter 28) discuss some initiatives to involve and interest the public.

Overall the book will be a useful tool for researchers and teachers of conservation biology. The case studies described in chapters 5–9 provide an insight into the problems faced and how they are sometimes overcome — these lessons will be very useful to workers designing and implementing species-specific studies and recovery programmes of fauna. One area not covered by this book is how to deal with situations where landowners deny reasonable access to scientists and managers who are trying to arrest population decline of an endangered species.

In this book there are many issues discussed and the book should be a useful starting place for the general public, politicians and students who require information on the conservation issues facing Australians.

## Herpetology in Australia: A Diverse Discipline

Edited by Daniel Lunney and Danielle Ayers  
Transactions of the Royal Zoological Society of NSW  
414 pp. ISBN 0 9599951 8 8  
RRP Aud\$82.00

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*HERPETOLOGY in Australia* was published as a companion volume to the proceedings of the Second World Congress of Herpetology, held in Adelaide in 1993–94. It does not attempt to pre-empt nor duplicate the information presented at that conference, but to provide an Australian overview of the study and management of Australia's reptiles and amphibians. As such, *Herpetology in Australia* also complements, rather than competes with, other key works, such as Cogger's *Reptiles and Amphibians of Australia*; herpetofaunal systematics and biology, including evolution, reproduction and behaviour, under both natural and captive conditions, are but minor elements of this collection.

The book is aptly subtitled, for indeed, the full and proper study of a group of organisms involves many aspects; Lunney and Ayres have done an excellent job in bringing these diverse strands together in one volume. Their most valuable achievement is the focus *Herpetology in Australia* brings to the current state of conservation of Australia's herpetofauna. Of the more than 60 papers, over half discuss issues related to their management, both in the field, and in government policy.

This theme can be traced through many of the papers dealing with ecology and habitat relationships of numerous taxa, at local and regional scales, particularly those considering potential or realized impacts of habitat degradation. Contributions range from specific case studies on the effects of logging on Victorian skinks, through to the more general, including reviews of environmental factors in the decline of Australian frogs.

Following on from these concerns, are overviews and assessments, at state and national levels, of the current status of Australia's herpetofauna. Again, there is a useful breadth of perspective, from an elucidation of processes threatening reptiles in native grasslands on the Southern Highlands, to an extensive review of herpetofauna status in the Northern Territory.

There is the growing recognition of the important functional role herps play in Australian ecosystems. Two papers illuminate this point particularly well. Kennett and Russell-Smith implicate fresh water turtles as critical agents for seed dispersal for riparian trees in northern Australia. During his research into Mallee-fowl populations in the semi-arid zone, Priddel found that the birds' large active incubation mounds were important, and possibly the only, aestivation sites for Giant Banjo Frogs in remnant vegetation. The continued persistence of this amphibian in these areas is potentially threatened by the imminent local extinction of Malleefowl through land clearing and fox predation. Both studies demonstrate the necessity and value of an actively diverse, yet integrated, herpetology; as does the interesting discussion of the cultural significance of snakes to indigenous Australians.

Several papers take up the extension of this knowledge of ecology, status and threatening processes — what do we do with it. In addition to the frequent decrying of inadequate information, more specific issues are highlighted, such as the importance of frog hybrid zones, and the recognition of cryptic herp species. There is also a stimulating debate over the directions and priorities of cane toad research; is the quest for *Bufo marinus* control agent distracting us from the more critical problems of human-induced habitat degradation in herpetofaunal decline? What is, can be, or should be, achieved at a government level is pursued further by papers detailing and discussing relevant state and commonwealth legislation and policy concerning herpetofauna.

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