

BOOK REVIEWS

OUTBACK RAMBLING

R. Symanski (1990)

Publisher: University of Arizona Press, Tucson

ISBN 0 8165 1167 5

Although this book on Central Australia was published in 1990, it deserves to be reviewed, in fact, it demands reviewing! My first reading made me angry because of the appalling way Europeans treated arid Australia and Aborigines. And angry because an American wrote the book. Who the hell did he think he was? On second reading, I apologised to Symanski. Perhaps it took an American, without our Australian cultural attitudes, to point out the obvious. Besides, he is wonderful writer, perceptive of both natural and social environments.

"If there is a common theme in this book it is, I think, a pivotal concern with land (as an irreplaceable resource), with life (wildlife, native life, and introduced life), and with the sorts of accommodations and maladaptations that have resulted when Europeans have imposed themselves upon a technologically inferior people easily subjugated" (p. xi). The book certainly has this common theme, and by the end, the reader has to confront some nasty truths about outback Australia.

Chapter 1 "Imagining the outback" is an unabashedly personal view: rich in images, strong on superlatives, but evoking deep reactions. It is superbly crafted prose. However, it also abounds with facts, and seduces the reader to accept inescapable conclusions. Symanski is not afraid to opine on the Centre. As a human ecologist, he is able to see the Centre as a complex of interactions and power struggles ebbing and flowing. He is scathing of attitudes to land: "...it is European man - Englishmen primarily - who have done the most to permanently alter the face of the Centre. ... Not surprisingly, there is very little understanding of or regard for anyone's future generations. And if somewhere in the Outback...there is a land ethic worthy of the name, its whereabouts is as elusive as the Holy Grail." (p. 9). Strong words indeed. This chapter is probably the most important in the book. It, like the nine others, is a stand alone essay. It is a searing indictment of Australian culture in general and the culture of the Centre in particular. Not very comfortable reading, but why should it be?

Symanski is optimistic of the future. He believes that once Australian tourists see and are appalled by Outback Australia, we will have voter-initiated change: new "laws that will rid two-thirds of the continent of archaic frontier power bases whose only interest has been short-term exploitation of irreplaceable land and native life,..." (p. 10). Personally I doubt the ability of tourists to understand the landscape, and the causes of its present state.

Any omissions? Symanski does not discuss the history of the fight for Aboriginal land rights. There is no mention of Wave Hill Station where the Gurinji people made their now-famous stand in early 1970s against wages, etc. and won land rights. Possibly a few photographs would have helped, but I suspect that they could not possibly capture the scenes as successfully as Symanski's written pictures. For example, only a video could capture the raw savagery and almost nonchalant cruelty of the cattle muster described in "Mustering the meat".

Any complaints? Only two. The first is a minor sin of omission. In yet another fascinating essay/chapter, Symanski describes being "out bush with bird biologists." He literally sings the praises of Nancy Burley, a biologist from USA working on zebra finches. She had studied them in labs in the US and found that coloured leg bands used to identify individuals altered the sexual attractiveness of the birds. Thus her "discoveries implied that the research findings

of more than 50 years of fieldwork are suspect." His omission: he does not find room among the praise to tell us that he is married to Nancy Burley. My second complaint is more substantial: the book is not available or even distributed in Australia. You can order one from a bookshop, or you could phone the University of Arizona Press in Tucson (0011 1 602 621 1441), and quote a credit card number.

The book is a very important contribution to arid Australia. Perhaps one of the most important books in recent years. I only hope that it will reach those who need to read it: self-serving politicians who have sold their pathetic souls for a few votes from the pastoral industry. Most pastoralists won't read the book, or if they do, they will dismiss Symanski as an ignorant American tourist. "...one of the first things they [pastoralists] ask of [range scientists and biologists] is: How long have you been here?" Like most range scientists, I have met the same arrogant question asked in the same smug manner. Why do we so meekly accept this humiliation of our professionalism?

Each essay in the book has its charm or horror depending on the topic. Each is full of factual data, perceptive observations, and (from what I can judge), solid conclusions. Symanski is a truly gifted story teller. He is talking with the reader, and often diverts for several pages in what is almost parenthetical comment or explanation before returning to his original theme. If Symanski achieves nothing else with the conversations, he may make Australian arid zone scientists ask themselves why they are fiddling while Rome burns.

This is an important book that deserves to be read by all Australians interested in the arid zone. You may not agree with what Symanski says, but he will make you think about your values.

Dr John Pickard
Senior Lecturer in Environmental Planning
Graduate School of the Environment
Macquarie University

ECOLOGICAL IMPLICATIONS OF LIVESTOCK HERBIVORY IN THE WEST.

Edited by Martin Vavra, William A. Laycock and Rex D. Pieper

Publisher: Society for Range Management, 1839 York St., Denver, Co., 80206, U.S.A.

This book resulted from a symposium called to evaluate the credence of livestock grazing on western rangelands in the U.S.A. It is very much an ecological defence of livestock grazing written by a group of 22 mostly rangeland scientists. Through eleven chapters, a reasonably balanced and comprehensive review has been given to the ecology of rangeland grazing.

The impact of grazing has focused on three biogeographical regions; the south-western grasslands and savannahs, the inter-mountain sagebrush associations, and the great plains. Steve Archer's chapter on woody plant encroachment in the south-west is particularly comprehensive, including examples of encroachment problems in Australia. This is the only chapter to make a significant reference to the potential impact of global climate change on rangeland ecosystems.

The chapters are only loosely connected to each other. The defence of grazing runs through most of the chapters, as does a rethink of traditional Clemensian range successional theory. Westoby's *et al.* (1989) 'state and transition' model permeates many of the chapters. There is a general recognition that 'pristine' states are only conceptual in nature and that multiple stable states exist as a result of interactions among climate, soils, grazing history, and management practices.

The inclusion of a separate chapter on riparian and watershed communities reflects the marked impact and controversy surrounding grazing in these habitats. It is an area of research and debate

that is just now being raised in Australia regarding the artesian mound springs in South Australia and lake-bed ecology and use in eastern Australia.

The book is biased towards the impact of grazing on plant physiology and composition. There are only passing references to the impact of grazing on soils, hydrology and biodiversity, with the exception of William Laycock's contribution regarding the implications of grazing *cf.* no grazing. This chapter and others illustrate both the benefits and limitations of long term exclosures. Some sites and exclosures date back to the late 1800s. There are literally hundreds of exclosures that are at least 50 years old. These exclosures are interesting reference sites, but differences between either side of the fence can be difficult to interpret. Total absence of large herbivore grazing is just as alien a treatment as the introduction of large European livestock species. Both Australian and American rangeland research suffers from a lack of long term studies involving a range of stocking rates.

Chapters are well referenced with extensive listings of literature cited. However, the quality of layout is uneven. Some chapters include colour illustrations, while others have poor quality dot-matrix figures and spelling errors. The table of contents does not include the authors associated with each chapter which can be irritating. It would have been helpful to have had at least one section in an introductory chapter that clearly summarises and references the main criticisms against grazing in the western US rangelands. Neither do the authors make reference to the other extreme view that periodic heavy grazing is beneficial to rangelands as espoused by Savoury (1988) and his followers. It is surprising that none of the authors make reference to the recent forum on grazing theory and rangeland management (Levin 1993), which focused on the application of herbivore optimisation theory in US rangelands.

This book does an admirable job demonstrating that livestock grazing can be compatible with rangeland ecosystems, but leaves it to just one author to draw together the broad management and policy implications of this ecological understanding. Federic Wagner does an admirable and brief job of it. Unlike the other authors, he points out that there are many competing uses and perceptions of the western U.S. rangelands. Rangeland science has been heavily biased towards consumptive uses. Wagner points out that non-consumptive oriented conservation biology has developed not in fisheries, wildlife or rangeland research departments but in biology and ecology departments. There has been a decline in public trust of rangeland agency professionals in the U.S., that should be heeded by agency counterparts in Australia. Wagner sees the role of rangeland professionals as providers of technical information and mediators for interest-group deliberations which are increasingly defining policy and directing management of public resources. Public trust and credibility in rangeland professionals must be maintained, which requires that professionals avoid advocating any particular policy option. Rangeland professionals have a responsibility to inform the public of consequences of alternative policy options. This book is a significant contribution to the public debate.

This book is a timely review of the state of understanding regarding the ecological impact of grazing on western American rangelands. There are many parallels and relevance to Australian rangelands. What the book lacks in coherence is balanced by the comprehensive expertise of its individual contributors.

References

- Levin, S.A. (1993). Forum: grazing theory and rangeland management. *Ecol. Appl.* 3: 1-38.
Savoury, A. (1988). 'Holistic resource management'. Island Press, Washington, D. C.
Westoby, M., Walker, B. and Noy-Meir, I. (1989). Opportunistic management for rangelands not at equilibrium. *J. Range Manage.* 42: 266-74.

David Freudenberger
CSIRO Division of Wildlife and Ecology, Canberra

RANGELAND HEALTH: NEW METHODS TO CLASSIFY, INVENTORY AND MONITOR RANGELANDS

Committee on Rangeland Classification, Board on Agriculture, National Research Council, 1994, 180 pages

Publisher: National Academy Press, 2101 Constitution Ave., Washington, D. C. 20418

Times are changing in the American rangelands! This well written and illustrated National Research Council report calls for a comprehensive shift in the way US Federal Agencies [e.g. Bureau of Land Management (BLM) and the Soil Conservation Service (SCS)] monitor and assess publicly owned rangelands. The committee's recommendations are quite relevant to Australian rangelands management; much of it is based on Australian research!

The committee proposes an abandonment of current Agency concepts of range condition (SCS) and ecological status (BLM) in favour of the term 'rangeland health' "to indicate the degree of integrity of the soil and ecological processes that are most important in sustaining the capacity of rangelands to satisfy values and produce commodities". Implicit in this term is a focus on indicators of ecological processes relevant to multiple use of rangelands. Rangelands have inherent values as well as the capacity to produce commodities. The committee acknowledged that health is a continuum, but recommends three general categories, healthy, at risk and unhealthy. The main impetus for a new monitoring and assessment system was to develop a national standard. The current lack of agreed-to standards "has and continues to confuse the public, the US Congress, ranchers and range scientists themselves."

The committee's conceptual framework draws heavily on Australian concepts of range ecology and management including Westoby *et al.* 1989, Friedel 1991 (referenced 6 times), Friedel *et al.* 1990, and Wilson 1989. The committee developed a non-linear state and transition model for rangeland health where each state (healthy, at risk and unhealthy) represents a complex of related plant communities rather than a single stable community. Plant communities change within a state with minor changes in the capacity to produce commodities and satisfy values. Conceptually, there is an early warning line between healthy and at risk states and a threshold between at risk and unhealthy states. The committee calls for integrated research and development of indicators of changes in state. In the interim, the committee recommends that all current inventory and monitoring systems should incorporate uniform indicators of soil surface condition as a matter of priority.

This report is well laid-out, attractively illustrated and edited in a uniform and concise style. Three case studies of long-term rangeland dynamics are dispersed within the text. The executive summary is comprehensive but short enough to photocopy for future referencing. The report includes a concise summary of historical and current Federal legislation affecting rangeland management. The review of past and current monitoring systems within various Federal agencies reinforces the need for a uniform national approach. This focus on Federal activities is also a weakness; 57 % of U.S. rangelands are non-Federal lands, much of it privately owned. The committee does not address the need for monitoring systems co-owned by and tailored to pastoralists (ranchers).

None the less, the report addresses critical rangeland issues in a balanced fashion reflecting the composition of the committee comprising a number of experienced rangeland scientists as well as private ranchers, environmental lawyers, rangeland consultants, a wildlife biologist and a couple of extension specialists. The book should be essential reading for all those immediately involved in monitoring and assessment as well as of interest to researchers, administrators and practitioners.

References

Friedel, M.H. (1991). Range condition assessment and concept of thresholds: a viewpoint. *J. Range Manage.* 44: 422-6.