Australian Environmental History: Essays and Cases edited by Stephen Dovers (Oxford University Press, Melbourne, 1994), pp. vi + 281, A\$26.95, ISBN 0-10-553482-4.

The perspective of time is the essential additional dimension in any study of the environment. Every earth scientist is acutely aware of geological time in a frame so extensive that the ordinary historian is bewildered. Anyone concerned with Australian flora and fauna must be conscious of changes in the world climate over at least 200 million years with all their implications for the formation of continents and the ultimate isolation of Australia.

Stephen Dovers has brought together twelve papers which explore aspects of the modern Australian environment viewed over time. Although what he calls Biophysical Australia, the physical context over aeons, is pervasive, the thrust of the collection is the impact of what he calls 'Europeans' over a mere two hundred years. Aboriginal occupation is variously given in the book as 40, 50 to 60 or 120 thousand years (the editing throughout is less than impeccable) and tribute is consistently paid to the remarkable symbiosis between Aboriginal people and the land and to the success of Aboriginal fire regimes, but Aboriginal Australia is rarely at the centre of these studies. Instead, the much modified flora and fauna of Australia observed by Cook and Banks and Phillip in the late eighteenth century is, like the geological substructure, primarily the setting for 'European' change.

One corollary of this lack of special expertise in Aboriginal land management is an indifference to archaeology. The discipline is not even mentioned in Dovers' wide-ranging introductory chapter, no archaeologist is among the contributors and alarmingly few archaeological works are cited by any of the authors. Heritage studies, where cultural landscapes are critical to historians, architects and archaeologists, are similarly neglected. And no one reading this book would be aware of the wider contribution of general and local historians, despite the editor's own critique of Hancock's Discovering Monaro or the stimulating overview by Bill Gammage, whose Narrandera Shire is a key text in Australian local history.

Instead the strong and welcome emphasis on interdisciplinary work concentrates on geographers, ecologists and scientists: four of the eleven contributors are from Resources and Environmental Studies at the Australian National University and three others are from Departments of Geography. The case studies which lie at the kernel of the book reflect this background and a more sophisticated knowledge of recent historical interpretation of Europeans and others in post-invasion Australia would have enriched the papers. The impressive sophistication of Stephen Morton's study of mammal extinction in arid Australia is a tour de force of clearly presented, eminently comprehensible, scientific argument. There is no comparable depth and width in other contributors' studies of specific areas of European settlement such as the hinterland of Boorowa in New South Wales or the Bogong High Plains in Victoria or the Brigalow country in Queensland or the forests in Western Australia and Tasmania. The theses which gave birth to Lawrence on Bogong and Fry on Boorowa are still a shade too visible and Lawrence's recurrent lapses into indigestible jargon defeat her own purpose. Fry's presentation of Meehan's survey notes of 1820 is an excellent reminder of the wealth of early documentary evidence, whereas Dovers' use of Stewart Ryrie's 1840 survey is a mere allusion and one laconic quotation. These opportunities to make nineteenth-century evidence a living component of a modern environmental study are too rare and too undeveloped in this book.

If the studies were more analytical, more argumentative, more dedicated to the basic historical question 'why?', these failures to present aspects of the evidence would be less obvious. But there is a great deal of narrative here, Dargavel on forests and Bowen on the Great Barrier Reef in particular, and powerful analysis is at a premium. Even in Dovers' study of Monaro, there is really no great new insight to put alongside Hancock's innovatory master-

piece, save to chide Sir Keith for concentrating on the good basaltic land. At the same time, Dovers is remarkably uncritical of the Snowy Mountains Scheme and strangely acquiescent in the planting of willows when these exotics are being systematically eliminated from the banks of the Namoi at Narrabri.

The collection of seven case studies is useful to show a readership of students and practitioners something of the range of work possible in environmental history. But, as the editor recognises, the concentration on rural Australia skews the sample. Even within the rural scene, the virtual absence of reference to mining is unfortunate. Lawrence touches on the mining history of the Victorian high country and Bowen discusses the threat of quarrying and oil-drilling on the Great Barrier Reef. But the more systematic and detailed study of the complex effects of mining the length and breadth of Australia over the past 150 years is lacking and its absence is not acknowledged.

The three general 'essays' do not succeed in giving a more thorough and balanced account of interdisciplinary scholarship. Eric Rolls, the author of a famous book on the Pilligga scrub of New South Wales and another book on animal life, indigenous and exotic, contributes fifteen pages of impressions, stimulating but idiosyncratic with too many unqualified simplicities about complex issues: there are no endnotes at all and no reader should treat this text with the deference accorded it by the editor. Ken Johnson's paper entitled 'Creating place and landscape' is very general, at times tending towards bathos, with issues and techniques of scholarship seldom met fairly and squarely. In particular his comments on the evidential use of artists and writers are elementary compared to the student essays done in recent years in Departments of Fine Arts, English and History. This is not cross-disciplinary work at its best.

The most impelling of the three general essays is Frawley on 'evolving vision' which begins grippingly on the Darling and achieves a telling critique of the last twenty years, not least in its cool appraisal of 'wise use'.

The book ends with nine pages by Bill Gammage, which are outstandingly good. Gammage's preferred phrase 'sustainable damage' ought to become a permanent replacement for 'sustainable development', since it encapsulates the problems of modern change so neatly and puts the emphasis precisely where it should lie. Throughout the rest of the book there is too little passion and too little specific concern about damage (such as the abandoned Pretty Valley dam project illustrated in Lawrence's study of the high country in Victoria). Gammage is not polemical but he is pleasingly forthright: 'We should be cautious about damage until we find out, because that may save us confronting even less pleasant questions — when will the last tree be cut? The last fish be caught? The last animal, the last person, die?' Gammage, too late, enunciates the key questions about the Australian environment since 1788: 'What was Australia's environment when Europeans arrived? How has it changed? Why?'. These questions, and most of all the last, await a magisterial answer.

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