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Book reviews

SEARCHING FOR PEKPEK: CASSOWARIES AND CONSERVATION IN THE NEW GUINEA RAINFOREST

By Andrew L. Mack

2014. Published by The Cassowary Conservation and Publishing LLC. 235 pp.

Paperback, USD \$17.95 plus \$18.50 international shipping. ISBN 9780989390309.

'Conservation is about people'

This highly readable book starts with a vision for a biological research station in Papua New Guinea (PNG) and ends with a diatribe against 'Big Conservation' organisations e.g. Conservation International, Wildlife Conservation Society and the World Wildlife Fund. If you think this doesn't sound like an attractive read, you would be wrong.

Mack's thesis is that if an internationally conceived project in a developing country hasn't been handed over to be run by locals within 15 years it should be considered a failure. In PNG it is simply impossible to design conservation measures that do not involve locals because all the land belongs to somebody. It requires the 'wantok' system to make any progress in desired changes in land management, or resisting damaging new changes conceived by oil drilling and logging companies. Wantok is the social system whereby people who speak the same language (one talk) command more influence and are involved in a complex of indebtitude that goes beyond money and possessions.

The book is rich in illustrating the differences in perception and skills of western and PNG cultures. Mack displays admiration for the prowess of the PNG people in coping in their torrid environment. For western readers it is the contrast in skills and attitudes that are so fascinating. For example two Cassowaries,

which had been raised from chicks and used to assess their efficiency as seed dispersers, had become Mack's pets. Nonetheless when that investigation ended they simply had to be eaten or the local assistants would have been offended and alienated. In similar vein, helping people get their coffee to market as backloads on supply aeroplanes backfired badly. Those who failed to get their crop transported felt aggrieved and this poisoned the whole relationship between the research station and the nearest village.

The triumph of the establishment of the first research station in a genuinely remote location and its eventual demise is a gripping tale. The realisation that the secret to conservation was the training of locals and the success that was achieved in the author's second career in PNG was frustrated by the perfidy of US-based supervisors who closed it. Big Conservation strikes again!

One chapter deals with the portrayal of the natural world as dangerous, when in fact death and injury from attacks by sharks and bears is miniscule compared with the mayhem caused by guns, cars and drugs. He laments the increasing number of TV programs that centre on the terrors of nature, and regrets 'poor Steve Irwin' who set a new (low) standard for the genre.

For a book extolling the scientific achievement of a research station and the success of a large number of PNG nationals, it is curious that there is no list of publications. Also strange is the lack of an index. Both would enhance this book. Nonetheless this is a valuable text for anyone involved in nature conservation, especially international projects. The take-home message is that people are the problem and (if there is a solution to the ongoing degradation of this planet) people must be party to the solution.

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RESPONDING TO CLIMATE CHANGE: LESSONS FROM AN AUSTRALIAN HOTSPOT

By P. Burton (Ed.)

2014. Published by CSIRO Publishing, Melbourne. 216 pp. Paperback, AUD \$79.95, ISBN 9780643108615.

This book by Paul Burton and colleagues describes how government, industry and the general public are responding to imminent impacts from climate change in south-east Queensland, Australia – a global hotspot for climate adaptation. Drawing on their experience in climate policy and research, the authors shed light on the challenges associated with implementing climate adaptation programs, and the role science plays in promoting adaptive capacity. A common thread among suggestions offered in *Responding to Climate Change* is that the traditional scientific

approach to problem solving often falls down when applied to problems of climate change. The authors challenge researchers to reframe such problems and subsequent adaptation solutions so that they may have more impact in society. This book will resonate with those working at the research and policy interface, and with students looking for a crash course in how to inform adaptive responses to climate change.

For those unaccustomed, three introductory chapters (Chapters One, Two and Three) offer useful insights into how climate adaptation policy is built and implemented. Chapter One describes three 'bear-traps' to avoid when delivering climate adaptation knowledge to policy makers. Somewhat refreshingly, the author doesn't accuse policy makers of laying these traps. Instead, pragmatic advice is offered for researchers to avoid laying traps for themselves. Chapters Two and Three describe in detail how unresolvable disagreement between key stakeholders can blind-side science-based policy solutions to climate change, and stagnate the development and implementation of climate adaptation

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programs. To avoid this stagnation, the authors argue that researchers need to embrace political-based solutions to hotly contested debates about how society should respond to climate change, and gear their research toward informing such solutions.

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I found the order of chapters from Chapter Three onwards confusing, so please excuse where I break from the chapter sequence presented in Responding to Climate Change. Chapters Four and 10 demonstrate how scientific research can inform political-based solutions to climate adaptation. Chapter Four describes how systems thinking and Bayesian Belief Network analysis can reveal key issues that prevent government and the private sector from adapting to climate change. When armed with this knowledge, the authors argue that decision makers are more likely to implement more relevant, and ultimately more successful climate adaptation plans. Chapter 10 recognises that the need to plan for climate change, when also tasked with pollution-reporting or land-use planning, can overwhelm governments and lead to inaction. As such, the authors describe a spatial analysis tool that can enable governments to work more effectively and efficiently. The tool integrates climate change planning, pollution reporting, disaster risk management and land-use planning, and the authors demonstrate its use with a case study of the 2011 floods in Brisbane. Chapters 15 and 16 further explore the research challenges of improving our understanding of flood risk as part of broader processes of coastal dynamics.

Chapter Seven reflects on the style and substance of contemporary climate adaptation policies across different levels of government in Australia. Readers will gain a new appreciation for the departments and councils who pioneered climate adaptation programs in Australia, and will engage with the authors' synopsis of how responsibility for adaptation has cascaded from the Commonwealth, to State governments, and finally to local councils. Perhaps prompted by concerns of further devolution of responsibility, Chapter Five describes how climate adaptation policy could become a multi-level governance agenda. The authors outline the generic principals of policy mainstreaming before proposing some implications, constraints and penalties for mainstreaming climate adaptation across governance levels in south-east Queensland.

Chapter Six, Eight and 13 are dedicated to describing the general public's involvement in political and practical approaches to climate adaptation. Chapter Six reflects on the role of public participation in climate adaptation planning. The authors present two case studies – one from the Gold Coast City Council, the other from the Sunshine Coast Council – that offer contrasting approaches to involving communities in adaptation planning. These case studies show that public involvement does not always to lead to effective climate adaptation policy. Chapter Eight discusses how outdated monitoring and management technology used in Bangladesh prevents people from

adapting their livelihoods to climate change. Easier access to updated water filtration and hygiene technology, authors argue, is critical to enhancing local adaptive capacity in developing nations like Bangladesh. Rounding out the community-centric contributions was Chapter 13, which explored how communities perceive risks associated with climate change. The authors found no empirical evidence to suggest that climate scepticism is related to a reluctance to perceive and adapt to heightened flood risks under climate change.

Chapters Nine, 11, 12 and 14 discuss sector-specific responses to climate change. Popular tourism destinations - alpine resorts, tropical islands, forests, deserts – are affected directly by climate change, and Chapter 9 describes how human responses to these impacts are likely to influence the viability of different tourism enterprises. The authors argue that tourism enterprises geared around one particular high-demand activity, in one place, may need to make substantial changes to business models in order to stay viable. Chapter 11 is an unfamiliar foray for those of us who primarily think about climate change adaptation plans for threatened species. Private property development, the authors argue, is a complex, dynamic and high-risk industry that has great influence over urban climate resiliency. Major developers in south-east Queensland, however, are not yet influenced by likely impacts of climate change or notions of inter-generational equity. Planning for Climate Change also discusses how climate change impacts are influencing decisions about water supply and management (Chapter 12) and the expansion of physical infrastructure, such as pavements and stormwater systems, in urban settings (Chapter 14).

The sequence of chapters in Responding to Climate Change leaves me thinking that there may have been a mix up on the publication floor. Notwithstanding their odd order, however, the chapters in this book will leave readers confident about how their science can feed into broad- and local-scale adaptive responses to climate change. The focus on south-east Queensland allowed authors to build quite a lot of useful detail into their case studies. Yet the book still manages to cover an impressive breadth of topics, including responses across all levels of government, within private sectors, and by local communities. As a PhD student grappling with the nuances of climate change policy negotiations, I found Chapter Two the most useful as it encouraged me to think more pragmatically about wicked problems. More generally, Responding to Climate Change is flush with key research findings and anecdotes that would normally take a long and successful career to accumulate.

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