

Book Reviews

Ten commitments: reshaping the lucky country's environment, edited by David Lindenmayer, Stephen Dovers, Molly Harriss Olson and Steve Morton, published by CSIRO 2008. 264 pages. ISBN 9780643095854, RRP \$29.95

After having read this book, *Ten Commitments* would not be out of place as mandatory reading for high school students as a part of the new national curriculum. But that might be narrowing the true scope and potential of the book for other Australians, notably resource managers, policy makers and politicians. This is a book that reflects one of the best attempts at defining how Australia should move ahead with the complex issue that is natural resource management and environmentally sustainable development. It is a sound foundation, a stone in the long path of transforming issues into potential policies and on-ground actions that are suited to the peculiar landscapes of this continent. It asks the question of what actions need to be done to address major (urgent) environmental issues in Australia. To help form a framework to address this question, the book commissioned a large number of experts to write what they deemed as being the 'top ten' issues that need to be addressed in order to improve the management of the environmental and natural resources. In a few pages, the authors draw on their research and management experiences to define their perspective of what are the most significant risks or opportunities facing resource management and conservation in Australia.

The book is broken into four main parts:

1. environmental issues over a variety of Australian ecosystems;
2. environmental issue in economic sectors;
3. cross cutting themes on ecosystem, marine and atmospheric processes; and

4. a synthesis chapter.

Across these chapters, a significant recurring theme is community based and adaptive management of the environment and natural resources.

Another recurring theme is the importance of management actions that match the spatial heterogeneity involved with landscape processes, and the need for ongoing monitoring and management adaptations as our landscapes change through time. These recurring themes point toward some important changes that governments should heed in regard to policy development and the establishment of research priorities and funding allocations. While the structure of the book allows these recurring themes to come to the fore, it also results in some repetition. Nonetheless, the structure of the book works well, the top ten format is easily digestible, conveys information well, and provides a clear list of priorities that governments should consider. It is very incisive as a means to divulge facts across a considerably broad array of fields in environmental management, biodiversity conservation and natural resource management. The collection of authors in one publication is commendable, and results in a book which delivers very informative contemporary thinking. As the not so lucky country begins to face the perils of climate change, the timing of the book is also pertinent. It is a must read for every Australian, particularly policy makers, environmental agencies, catchment and farmer groups, and individuals who have a passion for Australia's landscapes and ecology.

Dr Justin Ryan (PhD)

Post Doctoral Fellow, The University of Queensland

Facing the wild: ecotourism, conservation and animal encounters. Bulbeck, C. 2005. Published by Earthscan, London. 288 pages. ISBN 9781844071388, RRP \$64.95

In *Facing the wild*, Chilla Bulbeck considers the implications that human 'encounters' with animals have for environmental management and conservation. She argues that such encounters allow humans to reconnect with the natural world: a necessary process, for by being out of touch with nature, we risk destroying it. The author considers the role that the environment movement has had in separating humans and wilderness by idealising the latter as authentically 'pristine' or 'untouched'. She argues that this separation is founded on a dichotomy of nature/animal versus culture/human, and has the effect of limiting human engagements with nature and non-human species as a result. There is much evidence that so called 'wilderness' is in fact not pristine but touched in many ways by human interference. Separating humans from nature to avoid damage to wild spaces does not work: such damage

has already been done. For Bulbeck, engaging with the non-human world is necessary if humans are to implement an ethics of care for other species. Arguing that 'an honest obligation' (2005: xxiii) to environmental management and conservation must involve recognising human impacts upon wilderness, Bulbeck suggests that our understanding of nature as antithetic to the human must be reconfigured. By forging a renewed sense of cross-species kinship, Bulbeck believes that humans might overcome our views of nature as separate from humanity. Such views contribute to the instrumentalism that has occurred in human industries, in which animals and natural resources are deemed dispensable to human needs and wants. Instead we could embrace our connection with and dependence on the non-human world, learning to view other species as our planet's co-inhabitants, rather than as instruments for our own use.

Bulbeck believes that establishing kinship with the non-human world is a matter of engendering connections between humans and animals. Because they patrol 'our constructed borderlands between the human and the natural world' (2005: xiii), Bulbeck believes that interacting with animals has the potential to overturn the nature-culture dichotomy. Bulbeck argues that the distinction between nature and culture has arisen as a result of modern rationalism, which has established the 'naturalness' of the nature as oppositional to humanity and civilisation. This conviction places Bulbeck's work within the genealogy of ecofeminism. This is a movement which argues that parallels exist between the oppression of nature/animals and that of women in a world that views 'masculinised' rationalism and science as superior forms of knowledge. Ecofeminists recognise the contribution that science has made to fields of environmental knowledge, but argue that the dominance of these disciplines has limited the potentiality of 'feminised' forms of knowledge, such as emotion and connection, to contribute to these fields. Expanding upon these ideas, *Facing the wild* presents emotional connections between humans and non-humans as foundational for matters of environmental ethics, animal welfare and conservation.

Facing the wild is divided into two parts, each of which contains an introduction and three chapters. In the first part of the book, entitled *Back to Nature Tourism*, Bulbeck argues that viewing, touching, and feeding animals forge connections between humans and non-humans that have implications for conservation. She considers the experiences of visitors to nine surveyed ecotourism sites that allow humans to 'encounter' animals in such ways. The experiential material is derived from surveys and interview-based research, and also incorporates the author's own observations of the sites. Bulbeck examines both 'staged' sites such as zoos and wildlife parks, and sites deemed more 'authentic', including wilderness regions such as Antarctica. Despite their differences, it is apparent that each site promotes conservation in a different way. For example, in considering staged sites such as Monarto Zoological Park in Adelaide, Bulbeck discusses how the shift from zoo-as-entertainment to zoo-as-education over the past century has had implications for conservation. While education now operates at the forefront of the zoo experience, it is evident that some aspects of the entertainment paradigm still exist within this milieu. The incorporation of 'interactive' activities such as feeding and touching animals are a source of pleasure for many zoo visitors, and enjoyment operates alongside education at such sites. Bulbeck argues that what she calls "I" contact through "eye" contact' (2005: xvi) occurs as a result of such interactions, the result of which is that visitors gain 'a more complete experience of the animal' (2005: 32). She argues that the pleasurable aspects of human/animal encounters are therefore significant because they encourage cross-species connections.

It is evident for Bulbeck that sites such as The Great Australian Bight and Antarctica, at which visitors experience 'authentic nature' (2005: xxi), generate intense feelings in humans that have the potential to

change both lives and environmental attitudes. For some visitors, the feelings come from the sense of awe and wonder that these sites inspire. Other sites, including Western Australia's Monkey Mia, may be less 'authentic', but still arouse powerful emotions in human visitors, especially when they encourage direct contact with animals. Bulbeck examines the emotional responses that visitors to Monkey Mia express in the presence of dolphins, suggesting that the unique and awe-inspiring experience of touching and swimming with dolphins engenders environmental concern. This is an idea which is repeated throughout the book, with Bulbeck's analysis of the experiential material demonstrating that emotional responses to animals often transform into concern for the welfare of non-human species more generally. This is because encounters with animals would seem to offer the potential for humans to engage with other species in such a way as to recognise the needs and interests of others as just as important as our own. In such a way, Bulbeck argues, animals act as ambassadors for conservation.

In the second part of the book, entitled *The Nature of Modern Society*, Bulbeck explains how the connections forged through animal encounters might renew human connections with the non-human world. Bulbeck examines the romantic ideals that humans have about nature as a place of romance and an escape from their daily lives, tracing this idea back through Western history. She argues that the lives of Westerners today are marked by alienation and a loss of self, derived from the excesses associated with industrialisation and a lack of ontological security. As a consequence of these ills, Bulbeck claims that Westerners have turned to nature for solace and well-being. In wilderness, she explains, humans experience authenticity and spirituality, things that are lacking from our everyday lives. Dreams and desires for contact with the non-human world thus operate as an extension of what Bulbeck calls 'the quest to fill the emptiness of the self with the other' (2005: xxii).

Bulbeck argues that the human desire for wilderness experiences and cross-species connections can be coopted into what she terms 'respectful stewardship of a hybrid nature'. This concept is offered as a form of environmental management and conservation which acknowledges our dependency on the non-human world, as well as the impacts that we have had upon it. 'Respectful stewardship' involves humans taking responsibility for such impacts, learning to care for other species as well as for our own. It incorporates love of nature and romantic ideals about wilderness with practical knowledge about species and a commitment to environmental management. The concept of 'hybrid nature' embraces the coexistence of humans and non-humans in a 'nature' which is neither entirely natural nor entirely managed. Embracing hybridity in this sense means acknowledging the spectrum of rights, needs and interests at stake in various environments.

Bulbeck presents the concept of respectful stewardship in such a way as to combine the outcomes of her

experiential research with thoughtful theoretical analysis. She utilises the scope of existing literature that contributes to a paradigm for environmental management and conservation in the 21st century. In particular, her appropriation of the writings of the late Val Plumwood grounds her own work comprehensively within postmodern scholarship on the environment. The particularly Australian bent of *Facing the wild* also offers the reader insight into the role that animal encounter sites play in this country. Numerous black and white figures effectively illustrate the author's findings, particularly her descriptions and observations of the interactions between humans and animals at encounter sites. The index provided means the book is practical as reference material. The thorough appendices and notes set out the framework for the research methodology and survey/interview questions, as well providing additional information relevant to each chapter. The outline of the methodology would be particularly interesting for researchers undertaking similar work. In its utilisation of reference material taken from the arts (eg cultural studies, sociology) and the sciences (eg biology, environmental science), the book is interdisciplinary and would therefore be useful for students and researchers in a variety of fields. It would also appeal to anyone interested in ecotourism, and those concerned more broadly with conservation issues and human relations with the non-human world. From a personal perspective, *Facing the wild* has been an invaluable resource for my doctoral research, in which I consider the role that animal encounters play in engendering ethical human/non-human relations in tourism contexts.

Facing the wild presents a postmodern approach to dealing with environmental issues, one which aims to rethink the ways in which we divide our world into dualistic oppositions, such as nature/culture, or human/non-human. By challenging such dualisms, particularly in terms of their operation within conservation discourses, Bulbeck posits humans as part of nature, and vice versa. In this way her concept of respectful stewardship of a hybrid nature promotes kinship between two 'worlds' that are otherwise considered oppositional. Contra to the modernist paradigm for conservation, which sees humans as a threat to nature, the postmodernist angle contends that the key to solving current environmental problems lies within human connections with the non-human world.

Well-written and engaging, *Facing the wild* may help researchers tackle some of the issues we face in our relations with non-human species. The comprehensive analysis of field work, survey material and interview material, combined with the author's own observations at animal encounter sites, provides a solid practical foundation to support Bulbeck's theories. The concept of respectful stewardship of a hybrid nature has significant implications in terms of the development of a framework for environmental management and conservation that aims to engage humans in thinking creatively about these issues. In particular, highlighting the role that our emotional responses to nature might play in conservation terms offers a unique approach to dealing with the problems that affect our world today.

Nikki Savvides

Department of Gender and Cultural Studies
The University of Sydney

***Temperate Woodland Conservation and Management.* 2010. David Lindenmayer, Andrew Bennett and Richard Hobbs. CSIRO Publishing, Collingwood. 400 pages. ISBN 9780643100374, RRP \$89.95**

Temperate woodlands can be seen in the vicinity of the capital cities of southern Australia, but they once dominated the areas that are now the agricultural belts of Australia. Between expanding agriculture and urban growth these habitats have been replaced by crops and houses, have been modified for and by stock grazing, and are now represented mostly by paddock trees and small remnants with varying degrees of degradation. Both the dependent flora and fauna have suffered, with many species declining in abundance and distribution. Some such as the Leafless Indigo and Paradise Parrot have no confirmed records for over 50 years. Human modification has resulted in salinity, nutrification, erosion and acidification of these landscapes, which is posing problems for people as well as the native biota. Against this background there has been increasing research into the ecology, conservation and management of these disappearing environments.

Temperate Woodland Conservation and Management provides a current overview this ongoing work in southern Australia. The list of contributors to this volume contains most of the usual suspects who have studied woodlands

for the last few decades, and many of their recent accomplices. The authors of each chapter have dedicated years to acquiring the insights into their particular areas of expertise, be it birds, beetles, grasses or policy, that they reveal in their writings.

After an introductory chapter, each of the 40 main chapters has the same layout: list of key points (the handful of most important lessons learnt by the authors); introduction; discussion of the key points; and, conclusion. Also, each chapter is limited to around half a dozen pages plus references so the information is succinct with just the main supporting references, but with few visual aids. As such, each topic is densely packed with information synthesised to show the current thinking of the authors and how they got to their points of view. Many of the references used are very recent and provide the starting points for those who want to delve further into any topic.

For ease of comprehension, the chapters are arranged in four main parts: national research; state research; national policy; and, state policy. Even so, the state research part makes up over half of the book and covers a wide range of topics. Each chapter could have easily be

followed by several others and still maintain the level of connectedness achieved in the current layout. This does not mean that all the authors are of the same mindset. For example, within a few pages of each other is a dismissal of the value of guidelines and toolkits and an assertion of their importance. This dichotomy between the need for general principles versus the specific management for individual species or remnants in different regions is sprinkled throughout the book, and enhances its value as a summary of the current state of understanding rather than detracts from it.

The editors end the book by summarising the chapters into ten main issues, highlighting the many commonalities expressed but also showing the diverse range of opinions. However, it is within the individual chapters that you get the details of the way in which the various views are formed, and hence can judge their relevance to

your own considerations. Because of this, it is an ideal book for anyone wanting to delve into the woodlands of Australia, getting an insight into what woodlands mean to the authors in a way that reading their hundreds, if not thousands, of scientific papers would not quickly do. Even so, no matter what your topic is you will probably end up jumping between several chapters to look at the range of ideas presented.

The overarching message from this book is that every skerrick of our once widespread temperate woodlands is important, whether it is a paddock tree or a patch or forbs and grasses in the corner of a cemetery block, and that without our active intervention more woodland species and ecosystems will go the way of the White-footed Rabbit-rat. Within its pages are ways of understanding and attacking the problems facing these iconic Australian landscapes.

Murray Ellis

***Dry Times: Blueprint for a Red Land.* 2009. Mark Stafford Smith and Julian Cribb. Published by CSIRO Publishing, Collingwood, Victoria. Paperback, 176 pages. ISBN: 9780643095274 RRP \$49.95.**

In a world that is suffering increasingly from desertification and the accelerating effects of climate change, *Dry Times* sends a welcome message of hope that we can conserve the unique biodiversity of arid environments and ensure that they will continue to sustain humans and human livelihoods into the future. The focus of the book is very much on arid Australia – the *Red Land* – but the lessons that it draws for sustainable living should be applicable to arid lands everywhere. The senior author, Mark Stafford Smith, has lived and worked in central Australia for nearly 30 years and has thought deeply about the challenges and vicissitudes that shape life in this unique and extraordinary region. He and co-author Julian Cribb, an acclaimed science communicator, combine their collective wisdom and produce in *Dry Times* one of the most eloquent overviews of desert life and desert knowledge that I have seen.

The book has two main themes. The first is that arid Australia is a land of scarce and unpredictable resources that has profound consequences for the lives of the people who call it home and for the life cycles and strategies of the animals and plants that persist there. This part of the book emphasises that we must understand and work with this uncertain environment if we are to have any hope of conserving it. The first four chapters carry this message. They depict the physical locations of arid regions and describe why they occur where they do, they outline the ‘desert drivers’ or processes that determine how deserts work, and they paint evocative images of desert landscapes and the bizarre adaptations of their constituent biota. Here we learn of the numerical dominance of termites and ants, the astounding presence of desert worms, the self-organising patterns of desert vegetation, and the remarkable strategies that are used by people and other biota to track shifts in ephemeral resources. There is also a partly-resolved tension in this part of the book that

contrasts the stimulatory effects of desert variability on human innovation and culture with the disturbing effects of more droughts and increasing desertification in future. In keeping with the positive tone of the book throughout, the authors suggest that such future challenges may yield a “fresh outpouring of human imagination, creativity and innovation”.

The second part of the book, comprising six chapters, describes the human enterprise and how we might learn from the desert’s pulses and rhythms to live in Australia’s vast arid regions in a sustainable manner. The authors show that the deep knowledge base of Aboriginal people could be used as an exemplar of how inland communities might be organised and managed, and discuss how the social problems of living in small remote communities can be overcome. The importance of an effective telecommunications system is emphasised, foreshadowing very nicely the announcement by the Australian government (in 2009) that it would be establishing a high speed national broadband network to improve communication for people in all parts of the country. In further recognition of the functional differences between desert settlements and more urban society, the authors advocate greater devolution of political authority to more local levels. The final chapter summarises the key messages developed in earlier sections of the book and concludes by noting how lessons from the drylands must inform – and hopefully change – the lives of those in the nation’s and the world’s increasingly unsustainable cities. And it underlines how this blueprint for the red land should be a blueprint for humanity in all the places that people now exploit.

The book is written in an engaging and non-technical style, using quotes, line drawings, text boxes and colour plates to make its central points, and consigns references and notes to the end where they do not interrupt the flow

of the text. There is much that is new in this volume, and much scholarship that underpins the smooth and holistic perspective that the authors articulate. It does contain some small errors. The dashed and unbroken lines delimiting the semi-arid and arid zones of Australia have been reversed in the caption to the figure on page 2; Australia began to separate from Antarctica some 80 million years ago, but did not part company until nearly 50 million years later (page 11); and false antechinuses or pseudantechinuses rather than antechinuses occur in Australia's arid interior (page 37). However, such errors are scant and inconsequential to the reader's appreciation of the themes and flow of the book.

This book will appeal to anyone who is already fascinated by desert environments, but its positive prescriptions for how we can learn from these environments mean that it should be read by everyone interested in conserving biodiversity and ecological function and in achieving a more sustainable way of living. I strongly recommend *Dry Times: Blueprint for a Red Land* to students, scientists, managers and other practitioners in the natural and social sciences, to policy makers and to the broader public. Congratulations to the authors and to CSIRO Publishing!

Chris R. Dickman,

School of Biological Sciences, University of Sydney.

**Dingo. 2010 Brad Purcell. Published by CSIRO Publishing, Canberra.
176 pages. ISBN: 9780643096936 RRP \$39.95**

For many people, the word dingo invokes mixed feelings. For so many years in Australia, dingoes were hunted and trapped relentlessly and their pelts paraded as trophies of a fallen enemy. The sheep graziers hated them, as did most pastoralists. And for all that persecution, dingoes remain an iconic animal in Australia's psyche. You only have to go to Fraser island or Uluru and see the hordes of tourists gathering to photograph or admire the dingoes in the wild.

Many Australians are also uncertain about what a dingo is – is it just another type of dog or is it something more unique? In recent times, ecologists have examined the role of dingoes in native ecosystem to see what role they play and they have been surprised to find that, in many ecosystems, the diversity of native animals actually increases when dingoes are present!. Dingoes are the most effective way to control foxes and cats in natural areas and are a tool that can minimise the damage that these feral animals could otherwise inflict.

Of course, the argument that crops up is- are dingoes themselves a feral animal? We know that they are derived from the Asian wild dogs, but when did they become Australian? Brad Purcell spent a number of years radio-tracking and studying dingoes in the Burragarang Valley, to the west of Sydney. His time with the dingoes allowed him to gather valuable information about their behaviour and ecological roles, and from this research *Dingo* the book was born.

One of the primary aims of his work was to establish what a dingo is. To answer this question in an objective way, he chose to use DNA. Tissue samples were collected from pure breed and cross-bred dingoes and compared with the DNA of other dogs. The surprising result is that there was little difference in the DNA of dingoes and dogs, but there was a great difference in their behaviour and ecological roles. How do you recognise a dingo? How can you tell if it is pure breed or a cross breed? Do cross-bred dingoes behave differently to pure bred dingoes? Can dingoes be trained? Brad employed various technologies to gather his information, including GPS telemetry and passive camera traps. Soft-padded foot traps were used to capture dingoes and enable tissue

collection for DNA analysis. This data made it also possible to examine the relatedness of dingo packs. Scats were collected for dietary analysis and remote camera data revealed dingo movements, behaviour and changes in hunting strategies for the different seasons of the year.

Dingo is a combination of Brad's own data and over 50 years of other scientific observations to provide a comprehensive and objective portrayal of the lives of dingoes. Most importantly, the role of dingoes in ecosystems is examined and throughout the book dingoes are compared with other hypercarnivores, such as wolves and African wild dogs, to determine their impact on select prey species.

Brad's fondness for dingoes comes through in this book, despite his efforts to keep the text as impartial as he can. There are many short anecdotes and observation sprinkled throughout the text that are intriguing and make the book very readable. Statements and conclusions are backed up by tables of data, images or graphs- this is not a light text but built on real data.

I recommend all Australians, pastoralists and city folk alike, to read *Dingo* and to consider what is known about this creature. Dingoes are clouded by folk lore, some of which is true, some in hokum. If you want to know which is true and which is not, here is the opportunity to find out. *Dingo* is written in a style that is meant to be read by the general populace. I would far prefer people to base their opinions on reality than on hearsay. Brad is not judgemental of those who have had to resort to killing or trapping dingoes in the past, and he tries to put the potentially troublesome characteristics of dingoes into perspective. He also highlights the highly desirable characteristics of dingoes and simply asks the readers to consider both.

The book contains a number of stunning and significant images of dingoes and the text is supported by a comprehensive reference list.

Dingo is a must for anyone with an interest in Australia's unique fauna.

Dr Arthur White

RZS councillor

***The Bone Readers*. 2009. Claudio Tuniz, Richard Gillespie, Cheryl Jone.
Published by Allen & Unwin. 272 pages. ISBN 9781741147285 RRP \$35.00**

The story of early humans is a fascinating account of struggle, survival and death. Much attention has been given to the rise of early humans in Africa and their subsequent exodus to other parts of the world, but the story once humans left Africa is not a straightforward tale of colonization and success. Instead, the facts indicate that human development in the Asian region has been episodic, especially the invasion and settlement of Australia.

In the 1960s and 1970s, the fossils discoveries of early Aboriginal bones in southern Australia indicated an early occupation of Australia by humans. The discoveries also indicated that there had been more than one wave of settlement and that disparate lineages co-occurred at different times.

Australia has a pivotal position in unraveling the story of the arrival of the first humans in south-east Asia. Australia has some of the oldest *Homo sapiens* remains in this region, but these fossil bones were dated years ago using imperfect (and now outmoded) methods. These bones need to be re-dated, re-examined and assigned to a meaningful place in the human story. Current scientists lament that this has not happened and is not likely to take place in the immediate future. Any progress in this area is being stymied by the previous misdemeanors and inappropriate behavior of earlier scientists who have severed all trust with the original Australians, the Aboriginal people.

Bone Readers give a clear and lucid account of the rise of Australia palaeontology, the importance of the Lake Mungo and Kow Swamp discoveries and their early interpretation. The further discovery and interpretation has not happened, despite the subsequent discovery of *Homo floresinesis* (Hobbits) in nearby Indonesia. New discoveries about the dispersal of early humans out of Africa and their spread into Asia has set the scene for a major piece of human history to be unraveled, but the necessary work does not appear to be able to be undertaken in Australia. Why not? What is stopping this from happening?

The answer, not surprisingly, lies in the recent history of interactions between Australian anthropologists and the native Aboriginal people. Modern Aboriginal people resent the assumption that scientists can unearth and manipulate the remains of their ancestors without recourse. This

sentiment is based on some rather insensitive treatment handed out to Aboriginal groups in the 1950s and 1960s and the deceptions dealt to them in the name of science. In the 21st century, Aboriginal groups have much more power and sway over their ancestors remains than ever before and they are loathe to allow scientists to tinker with these bones, regardless of the assurances of a safe return (which they have heard before).

Scientists, on the other hand, bemoan the thought that precious skeletons and artifacts might be returned and reburied and forever lost to further scientific examination. This scenario is not unique to Australia: the First Peoples of the Americas have entered into a new arrangement with American scientists over the treatment and possession of ancient bones and artifacts. In Australia, the impasse between scientists and traditional land owners remains, and there seems to be little ability by either side to develop an agreed long-term use for these scientific and cultural treasures. Without access to the ancient bones and remains, Australian anthropologists are forced to speculate more and more, the science is suffering as a result.

Bone Readers is an entertaining read for an outsider as it opens up not just the science of early human studies, but the characters and politics within. There are highly readable overviews of human prehistory and how scientists interpret fossil to explain how early humans lived and dispersed. *Bone Readers* explains the current state of knowledge, but it is provocative (especially if you are an Australian anthropologist). Most readers would be frustrated with the current deadlock and would urge all parties to work together to achieve a mutually satisfactory outcome. Science has the ability to add some really wonderful details to early Aboriginal history, as well as raising the profile of the role of modern Aboriginal people in Australian society, but this has to be with a great deal of sensitivity. Aboriginal people need to be able to develop new liaisons with the current scientists so that progress can be made, without forsaking their grand heritage.

After reading the *Bone Readers*, you will be so much wiser about the interplay of science and society and appreciate that humans are, after all, quite a strange bunch.

Dr Arthur White
RZS councillor