The Sixth Extinction: Biodiversity and its Survival

Richard Leakey and Roger Lewin
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PETER STEWART[1]

RICHARD Leakey and Roger Lewin are recognized authors in the field of natural history and palaeontology. Leakey was for many years Director of the National Museums of Kenya and, until recently, Director of the Kenya Wildlife Service. It was in this role that he probably became most famous when he instigated the burning of twenty-five hundred gasoline soaked elephant tusks, to advertise the plight of the endangered African Elephant. Roger Lewin is an Associate of the Peabody Museum, Harvard University.

This book is about the biodiversity of earth and the complexities involved in evolution and extinction. It is also about the impacts of humanity on this diversity, and whether or not we may be responsible for another mass extinction. Its purpose is to use new insights gained in evolutionary biology and ecology to create a greater appreciation of Earth's living wealth.

The book is split into four sections. The first looks into the complex interplay between the creative processes of evolution and the changeable forces of extinction. The second looks at the place of *Homo sapiens* in the scheme of things on earth. It wonders if we **are** the pinnacle of evolution, and outlines the case for preserving biodiversity on earth. The third embroils the concepts of stability and chaos in ecology, and how ecosystems are a dynamic entity of constant change. It also looks at human impacts and how we have affected communities and ecosystems. The final section pulls together the arguments put forth in the previous chapters and applies them to the future. The authors vehemently state that humanity has a responsibility towards the maintenance of biodiversity, otherwise we could be witness to another mass extinction.

The book's aim is to aid in educating the general public to the plight of the survival of the planet. It achieves this gaol, although at times the vocabulary may be a little hard for the average person to follow. Unless one is conversant with the geological past, the fifth chapter "Extinction: Bad Genes or Bad Luck" may also lose some readers with its referrals to the respective eons, eras, epochs and periods. As a whole, the book helps organize views on the environment and conservation into a rational way of thinking, and alters perspectives from an anthropocentric outlook to a more ecocentric one. I thoroughly recommend this book to anyone with even the slightest curiosity about the ecological balance of life on Earth. It will serve to open eyes and give a greater appreciation to our place within this dynamic realm.

[1]School of Natural Sciences, Edith Cowan University, Joondalup, Western Australia, Australia 6027.

Proceedings of the 1994 Rock-wallaby Symposium *Australian Mammalogy*

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SUZANNE CUMMING[1]

THE widely studied Australian marsupial genus *Petrogale* comprises 15 species of rock-wallaby with 26 known taxa. They are found throughout mainland Australia and on some continental islands. Rock-wallabies prefer habitats containing rocky areas with complex topographies of rock-piles, cliffs, crevices, ledges and caves. Although no rock-wallaby species is critically endangered, many populations and races are at immediate risk of extinction, and there are unexplained declines occurring in populations that are not endangered. Southern Australian taxa and populations appear to be more threatened than northern Australian taxa.

This special issue of *Australian Mammalogy* (Vol. 19, No. 2) presents a summary of knowledge of *Petrogale*. The proceedings cover aspects of rock-wallaby taxonomy, status and distribution, and presents case studies on individual taxa. Also discussed are techniques being used to further knowledge on the genus and assist in developing conservation and management strategies, such as the Aboriginal involvement in the surveying of rock-wallabies; the use of faecal pellets for monitoring populations; and the uses of genetic material in the study of *Petrogale*.

The papers differ in their structure and complexity. The first seven papers are structured like the results section of a scientific report with just a straight listing of the known facts. As such, they are tedious, although some interesting points are raised. The paper on chromosomes and evolution in rock-wallabies is very complex, and unless you are a genetics expert you will need a good dictionary while reading this one.

[1]School of Natural Sciences, Edith Cowan University, Joondalup, Western Australia, Australia 6027.