

# Book reviews

## **The Encyclopaedia of Mammals: 2**

Edited by David Macdonald  
Allen and Unwin, London, 1984, £25.00

David Macdonald has done it again. His first splendid volume covered carnivores, sea mammals and primates. This second part deals with herbivores, insectivores, and marsupials. The whole thing is an expertly compiled, lavishly illustrated, and altogether first-rate piece of mammology. It contains massive amounts of text, and hundreds of full-colour photographs—all at the comparatively knock-down price of £25. I have rarely encountered an encyclopaedia that is so interesting and informative, not to say illuminating, from start to finish

Of course this is not the work of a single person. The contributors to this edited volume comprise a lengthy list of established experts in their diverse fields. So the product is an authoritative assembly of our current state of knowledge on the mammals.

If I were to raise an eyebrow about this fine production, it would be about the lack of discourse on what we *do not* know about mammals. Of course, Macdonald and the publishers may have simply had other intentions. All the same, I was surprised that when we come to that sector of the mammal world that comprises at least 1000 species, or roughly one-quarter of all mammals, viz. bats, many of them virtually undocumented, I did not encounter some creative speculation on how many species might await our discovery. Moreover, I did not find as much information as I would have liked on bats' relations with their biotic communities: more than one in four of bat species is a pollinator, hence many bats are lynchpin species in tropical forests. And while there is some good material on the diverse threats that are overtaking bats, by virtue of their specialised lifestyles and often very localised distributions, there is not sufficient emphasis, for my preference, on the prospect that we may conceivably lose more bat species by the end of the century than all other mammals put together.

The nearest competition to this book lies with the voluminous work, Walker's *Mammals of the World*. But the two are not strictly comparable. Macdonald's book is rather less technical, and 120

more popular in substance and style, hence more palatable to the lay reader, and—the big and!—more directed to conservation concerns.

I am sure that this book will become a well-thumbed tome on my shelves.

*Dr Norman Myers, Consultant in Environment and Development*

## **Tropical Rain Forest: Ecology and Management**

Edited by S.L. Sutton, T.C. Whitmore and A.C. Chadwick

Special Publication No. 2 of the British Ecological Society  
Blackwell Scientific Publications, Oxford, 1983, £28.50

This substantial book contains 34 papers presented at Leeds University at Easter 1982 to celebrate the 21st anniversary of the BES Tropical Ecology Group. All contain original research or comment that will be a reference point for many years to come. Tim Whitmore says in the Introduction, 'we hope this volume will appeal to a wide audience interested to discover some of the exciting fields of tropical forest science'. By all accounts it will.

The papers are grouped into four sections: I. Community structure and diversity, both spatial and temporal, of vegetation and forest canopy animals, mainly insects. II. Plant-animal interactions including frugivory and seed dispersal, leaf predation/survival including foraging strategy of leaf-cutting ants. III. Decomposition and nutrient cycling including the role of invertebrates and fungi in litter decomposition and in soil rejuvenation. IV. Resource management, which includes those papers that directly discuss ecological principles of conservation, monitoring and possible strategies.

Using FAO data Alan Grainger estimates tropical deforestation at  $6 \times 10^6$  ha per year, but estimates are difficult to come by and often official figures can be at variance. The potential of remote sensing is discussed and K.M. Green shows, using the Madhupur Forest of Bangladesh as an example, the value of *Landsat* satellite imagery in the study of land-use changes and ecosystem mapping. In this same section are three Regional reports—1. de Gusmao Camara: Brazil; 2. G.S. Hartshorn; Central America (in which is given a

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