

Kew, 1989) provides an authoritative short guide for Old World mycophiles, but anywhere between nought and four pages are devoted to poisoning in seven widely used European mushroom field guides. Benjamin's book will complement them, and the anecdotal style and liberal quotations recompense a barren day's foraging.

*Mushrooms* will not occasion a miraculous conversion to mycophily in traditionally mycophobic countries, but it promotes a rational response to mushrooms and could even save your life. □

David L. Hawksworth is at the International Mycological Institute, Bakeham Lane, Egham, Surrey TW20 9TY, UK.

## Landscapes in transition

David R. Montgomery

**The Changing Earth: Rates of Geomorphological Processes.** By Andrew Goudie. Blackwell: 1995. Pp. 302. £65, \$74.95 (hbk); £19.99, \$29.95 (pbk).

How fast do soil and rocks move around? This deceptively simple question lacks a simple answer, as processes forming the Earth's landscapes vary dramatically in nature and rate. Andrew Goudie's *The Changing Earth* presents an engaging summary of published research on rates of geomorphological processes, providing a unique resource for those concerned with the form and dynamics of the Earth's surface. It should interest professionals, researchers and advanced students in the environmental sciences.

Most of the compiled data come from the second half of the twentieth century, when development of new methods for measuring rates of geomorphological processes helped to drive the shift towards process-oriented geomorphology and away from traditional qualitative models of landscape evolution. Today, digital topographical data and increasingly sophisticated simulation models promise to revolutionize understanding of landscape evolution by better linking these two approaches. Although fulfilling this promise requires knowing the rates of the processes that build and sculpt real landscapes, compendia of these rates remain conspicuously absent.

Goudie's book provides a succinct review and synthesis, with chapters on weathering, fluvial, hillslope, aeolian, glacial, coastal and tectonic processes. The strengths of the book lie primarily in the critical review of methods for measuring geomorphological processes and the compilation of rates drawn from the literature. Each chapter contains critical

discussions of relevant field and laboratory methods, assessments particularly pertinent to those seeking an introduction to the discipline. Compilations of published studies illustrate the range of reported rates for specific processes and to some extent the relationships to factors governing these rates. Although this latter discussion provides a valuable reference, its scope defines the major weakness of the book: Goudie offers little original interpretation of the dominant controls on process rates.

Particularly effective is the use of nineteenth-century quotations to highlight the way in which our understanding of process rates and interactions resolved classic controversies, but still begs long-held questions about landscape evolution. Indeed, increasing knowledge of the interactions of processes controlling land form illustrates the naivety of many simply phrased questions about the Earth's surface. □

David R. Montgomery is in the Department of Geological Sciences, University of Washington, Seattle, Washington 98195-1310, USA.

## Under cold stone

J. L. Cloudsley-Thompson

**A Natural History of Amphibians.** By Robert C. Sebbs and Nathan W. Cohen. Princeton University Press: 1995. Pp. 316. \$29.95, £19.95.

IN recent years, both teaching and research in natural history have declined in popularity, and greater attention is now being accorded to cellular and molecular studies. Although the importance of these modern disciplines is unquestioned, it is equally important to study life at the other end of the spectrum of biological organization — knowing all there is to know about a lion's molecules and cells will not tell you why it roars. Many of the studies reported in this book provide fine examples of the first approach but, although the authors claim that it is intended for a general audience, they have not contented themselves with a mere superficial account of the subject. This is a scholarly academic review of most aspects, apart from taxonomy, palaeontology and evolution, of a class of vertebrates containing about 4,550 described living species. The bibliography alone comprises 46 pages listing nearly 1,000 carefully selected references. Not surprisingly perhaps, the emphasis is on the work of US authors — for instance the African toad *Bufo regularis* is not mentioned, although a good deal of research has been carried out on it by British zoologists — but publica-

### New in paperback

**The Origin of the Species** by Charles Darwin (2nd edn). Edited and with an introduction by Gillian Beer. Oxford University Press, £5.99. Oxford has chosen to reprint in its World's Classics series the second edition of this great work: published a mere six weeks after the first, it contains Darwin's responses — many of them climb-downs and hedges — to criticisms from his peers and the public.

**Robert Oppenheimer: Letters and Recollections** edited by Alice Kimball Smith and Charles Weiner. Stanford University Press (distributed in the United Kingdom by Cambridge University Press), \$14.95, £12.95. The letters span from Oppenheimer's graduation from Harvard in 1922 to his departure from Los Alamos in 1945, as well as recollections from his friends and colleagues.

**The Monkey Wars** by Deborah Blum. Oxford University Press, \$14.95. A balanced, wide-ranging and informative account of the issues and personalities behind the debate about the use of primates in research. Reviewed by James Jasper in *Nature* **371**, 293 (1994).

**Superforce: The Search for a Grand Unified Theory of Nature** by Paul Davies. Penguin, £7.99. A classic work of popularization, first published in 1985 and now updated and expanded.

tions emanating from other regions of the world have not been neglected.

The first 19 chapters are concerned with a variety of aspects of the biology and behaviour of extant amphibians (anatomical features, sensory structures, respiration, nutrition, voice, anti-predator defences, temperature and water regulation, home ranges and movements, migration, territorial behaviour and reproduction), whereas a final chapter is devoted to their worldwide decline in recent years. A useful addition is the indication, in parenthesis after its name, of the geographical distribution of each species mentioned in the text.

Although the authors cover much the same ground as William E. Duellman and Linda Truib in *Biology of Amphibians* (McGraw Hill, 1986) and, to a lesser extent, Martin E. Feder and Warren W. Wurggren in their edited volume *Environmental Physiology of Amphibians* (University of Chicago Press, 1992), the new synthesis has the advantage of being more compact and up to date — knowledge of amphibian biology is today advancing rapidly. Like its predecessors, the book is well illustrated by photographs and drawings. □

J. L. Cloudsley-Thompson, emeritus professor of zoology at the University of London, is at 10 Battishill Street, London N1 1TE, UK.