

Herpetology after Smith

Brian Groombridge

Reptiles and Amphibians in Britain.

By D. Frazer.

Collins: 1983. Pp.256. £11.

IN the field of herpetological literature, whether academic or popular in tone, Malcolm Smith is a hard act to follow. Deryk Frazer's book, the latest (number 69) in the valued *New Naturalist* series, is an attempt to replace Smith's earlier and much revised book (number 20, *The British Reptiles and Amphibians*) in the same series. It was decided that the old book would not bear further revision to the extent demanded by recent research. It is pertinent to compare the two works.

The new may indeed replace the old, but in this reviewer's opinion, it does not supersede it. Smith's book, first published in 1951, was written during his retirement to Britain after a quarter of a century spent in the tropical Far East. Smith was a worker of great international repute, with immense field and museum experience. His book on the British herpetofauna fully reflects this experience; his masterly assembly of information, his liberal use of obscure but relevant quotations, and his elegant prose, are redolent with an air of gentlemanly scholarship, reflecting a tradition now sadly past.

Unfortunately, the volume of information now available on amphibians

and reptiles in Britain is great enough to almost prohibit making a similarly coherent and all-embracing exposition today. Deryk Frazer has made a valiant attempt at this task; however, whilst many new research data are incorporated, his text often epitomizes the case of failing to see the wood for the trees.

The general organization of the old book and the new are broadly similar, with accounts of each species being preceded by an overall introduction to the larger group to which they belong. In each instance Smith's book succeeds in providing an effective overall view that Frazer's book does not quite achieve, no matter how many new or additional data are incorporated. Identification and anatomical data are abbreviated and inadequately illustrated. However, Frazer does include a valuable chapter on conservation. Another shortcoming of Frazer's book is the clear bias towards amphibians. Whilst this reflects the author's chief area of expertise, it is disturbing to find no mention of some relevant literature. Despite such drawbacks, Frazer's book certainly provides a convenient review of much recent research on the British herpetofauna, a good lead into much of the relevant literature, and will tell the enquiring naturalist much of what he or she wants to know. All herpetologists and most naturalists will need and wish to read it. □

Brian Groombridge compiled the IUCN Red Data Book on threatened amphibians and reptiles, and is at the Conservation Monitoring Centre, Cambridge.

that is illustrated. There is also a chapter on how to set about collecting fossils, and advice on proper attitudes towards the non-renewable resources of our fossil beds is given.

David Lambert's *Collins Guide to Dinosaurs* (in the USA, *A Field Guide to Dinosaurs*) is surely the most complete dinosaur book ever published. It lists, and describes briefly, nearly every dinosaur genus ever described. This portion of the book is very up to date, including many of the genera that have been described in the last few years, often in relatively obscure Russian, Chinese and South American journals. There are even some as yet unnamed dinosaurs that are described here on the basis of press reports and personal communications. The other particularly useful sections include a series of maps of all known dinosaur localities (including details of those in Mongolia and China) and a long list of dinosaur museums of the world, each with a summary of the most important exhibits. This book is a delight for any dinosaur fan (like myself) since it is the best quick source for the vital statistics on all known dinosaurs. If only the author could publish a bibliography of all the works that he must have consulted!

The text is pitched at late teens and adults, but younger dinosaur fanatics will doubtless pore over it excitedly and make sense of it by use of their overdeveloped command of polysyllabic words. The quality of production and the drawings are very fine. However, unlike Fortey's book, there is not enough room in *Collins Guide to Dinosaurs* to give an extended discussion of what all of these genera of dinosaurs mean. There are short sections on the biology of each group and on evolution, feeding, physiology, extinction, and so on, but other currently available books have more discussion of these matters.

I feel that Lambert has been constrained by the organization of the book into giving less information than he could have done. Many of the genera included here for the sake of completeness are really indeterminate — single broken teeth and the like. Further, every genus is illustrated by a silhouette pictogram to show size and shape, and each is plotted on a general locality map at the foot of the page. This, unfortunately, means that only a few of the better-known genera have been illustrated as actual fossil bones or as reconstructions. Nevertheless, I feel the book will be a best-seller because it is the most exhaustive dinosaur book ever published — it is literally bulging with more names of dinosaurs than have ever been seen together in one place before. It will be enough to keep those interested in dinosaurs quiet for a very long time while they contemplate such mouthfuls as *Therizinosaurus*, *Szechuanosaurus* and *Muttaborrasaurus*. □

Michael J. Benton is at the Department of Zoology, University of Oxford, and University Museum, Parks Road, Oxford.

Past glories

Michael J. Benton

Fossils: the Key to the Past.

By Richard Fortey.

British Museum (Natural History):

1983. Pp.172. Pbk £6.50

(£5.95 at the Museum).

Collins Guide to Dinosaurs.

By David Lambert.

Collins/Avon: 1983. Pp.256.

£6.95, \$8.95.

MANY fine popular books about palaeontology have been published recently. It is a pleasure to review two new books that provide different approaches to the subject and do so in an attractive and authoritative way.

Richard Fortey has done two jobs in his book *Fossils: the Key to the Past*. Firstly, he has presented an interesting account of the uses and relevance of palaeontology in general, and dispels the outmoded stereotype of palaeontologists as old fossils themselves. Fortey shows well the present emphasis in palaeontology on the study of past environments, functional mor-

phology, evolution, extinction and stratigraphy. There are especially good sections on "bringing fossils back to life", on extinction (with a very level-headed discussion of the extinction of the dinosaurs in which the author concentrates on what we do know rather than what is speculation), on the early life of the Precambrian and Cambrian, and on the uses of microfossils in stratigraphy.

The second task that Fortey has performed in his book is to inspire and instruct the amateur fossil collector. Many people are fascinated by the beauty of fossils and they build up collections often with a great deal of effort and expense. Several coffee-table books containing sumptuous illustrations of fine fossil specimens have been published recently, but the supporting text has often been indifferent. A large part of the present book is illustrated by excellent photographs, many in colour, and these will certainly attract many purchasers. The only poor photograph is one taken through the fossilized lens of a trilobite eye (p.86)! The specimens illustrated are all very fine, and yet most of them are not too difficult for the amateur to collect. Fortey has appended notes on the occurrence, significance and preparation of each specimen