

Book reviews

concentrate on the larger, more spectacular species such as crocodiles etc., some of the smaller reptiles and amphibians will become extinct before they are listed.

There are three possible solutions to this problem. First, continue with the present appraisal, and accept that the more spectacular species will get more attention; second, develop a less detailed, but more comprehensive approach; third, develop an entirely new, perhaps ecosystem-oriented approach. Whichever of these strategies is adopted I believe that a radical examination of the concept of endangered species listings will be needed. At present, the RDBs are extremely comprehensive and presumably aimed at well-informed scientists — but are they the ideal target? Perhaps they should be aimed at journalists, politicians, lobbyists or the general public. Whichever groups are defined as being important, they should be clearly identified and the product designed to meet their requirements.

But none of the above is intended to denigrate the current RDBs in general or the first of the Herps. in particular; it is an invaluable document, highly recommended to all conservationists. It is also pleasing to note that the price is extremely modest for such an important work, of over 400 pages.

John A. Burton

NB, this volume is available from ffPS price £12.50 inc. surface postage.

Man and Fisheries on an Amazon Frontier

Michael Goulding

Developments in Hydrobiology 4

Dr W. Junk, The Hague, Dfl 90,

US \$47.50

Despite the rather high price for 137 pages, this book is an important one for all those concerned with economic development in the Amazon rain forest. Although the Amazon is the largest river system on earth, with by far the largest freshwater fish fauna, until recently the biology of the commercial fishes was little known. Mainly catfishes and characoids (with giant Arapaima, some cichlids and others), the large size of many of them and their long migrations through complex and relatively unexplored river systems has made

102

them difficult to study. Goulding's own work has now brought out very clearly the intimate relationships between the fishes and the forest (see also his 1980 book *The Fishes and the Forest*, University of California Press). Many species are dependent on the flooded forest for food and sheltered nursery grounds, while certain fishes have important roles in dispersing tree seeds. This present book concentrates on the Rio Madeira, one of the main Amazon tributaries and itself one of the world's major rivers. After looking at the prevailing physical and biological conditions it gives a fascinating portrait of the opening up of the Madeira basin (with its railway to bypass rapids, initiated in the rubber boom, and later highway development) and the effects of this on protein flow and fishery development. Clear diagrams illustrate the fishing methods; numerous black and white photographs show the fishermen at work and the main food fishes. A section summarises what is known of the biology of each of these. Goulding concludes by examining the relative productivity of these fisheries, problems to be faced, and management possibilities. It is clear that the destruction of the Amazon floodplain forest will inevitably have profound effects on the commercial fishes.

R.H. Lowe-McConnell,

Fish Section, British Museum (Natural History)

Antarctic Wildlife

Photographs: Eric Hosking

Text: Bryan Sage

Croom Helm, £12.95

The Antarctic has long been a focus of attention for sealers, whalers, great explorers and scientists, but more recently it has had a new invader — the cruising tourist. Cost will probably prevent many of us from joining the tourists, but for a little less we can enjoy Eric Hosking and Bryan Sage's book on Antarctic wildlife which was born from Eric's invitation to join a tour on *Linblad Explorer*.

This is a pleasing book with many excellent photographs of the kind we would expect from an old master like Eric Hosking. Bryan Sage's text is competent and informative, if perhaps rather uninspired in places. There are chapters on the history of the area, general ecology of the land/ice areas, the ecology of birds and seals, and an

Oryx Vol 17 No 2

Book reviews

interesting chapter on how to 'blat off good grips'* in the Antarctic. There is very little to criticise about what is included, but there are omissions. The marine ecosystem is not covered, which is puzzling when one considers that the wildlife of the area depends for its richness largely on the sea's productivity. Does this omission reflect the availability of photographs? There's lots on birds, less on seals, few whales in sight and nothing on the poor old unphotogenic invertebrates. Future conservation of the great resources of wildlife is not discussed — what about threats from tourism? This is a book in which the photographs have not been taken to illustrate the text, and occasionally the marriage between the two is a bit shaky.

The strength, and certainly the selling point, of the book is its photographs and it is thus a great pity that the publishers have elected to spread a good photograph across the central join on almost every page. In summary, it is an enjoyable book to look at, but it does not pretend to be a comprehensive scientific work.

*Antarctic-ese for 'take good photographs'.

Sheila and Peter Anderson-Witty,
British Antarctic Survey

Discoveries of a Crocodile Man

Tony Pooley
Collins, £8.95.

What a fascinating book this is. But then, perhaps we should expect no less from a man who has been working with crocodiles in the wild for some 20 years, who observes them with a scientific eye and with sympathetic spirit, and who helps to conserve them both in their natural habitats and through captive rearing. As a founder member of the Crocodiles Specialist Group under SSC, and as one of the more activist as well as committed conservationists in southern Africa, there is no doubt about Pooley's commitment.

Fortunately for us and his crocodilian charges, Pooley can tell his tale with straightforward prose and graphic detail. His story is indeed one of discovery. He starts out with his conventional reactions of fascination and fear — almost, one senses, of repulsion mixed with reverence. It did not take him long, during the course of his field observations, to learn that there is much more to

crocodiles than established images. He describes the social behaviour patterns of crocodiles, more convoluted and refined than one might expect; he reveals how adaptable they are, able to cope with floods and drought alike, thanks to far more sophisticated physiology than one supposes at first blush; he describes their foraging strategies, stressing (for those to whom the message might still be new) that, through their ecological relationships, crocodiles are generally helpful rather than harmful to fisheries of lakes and rivers; and he recounts the maternal solicitude that is shown to infant crocodiles until they learn how to cope with a world full of enemies. It is this last feature, care of the young, that is best illustrated through the splendid photographs, including several shots of a mother crocodile picking up and bearing babies in her throat pouch, 20 of them at a time, from riverbank nest to riverine nursery.

When we look at a distribution map of the crocodile in Africa, we may find that it still enjoys a pretty broad range. True, its numbers have been sorely depleted; but it still pops up in many parts of the continent south of the Sahara. But herein lies an illusion. Whereas zebras, elephants and lions may well roam from one horizon to the next, crocodiles are confined to very small sectors of African landscapes. Not just any old patch of water, but those aquatic habitats that allow the crocodile to haul itself on to land with ease — these being precisely the waters-edge areas that are most favoured by humans, generally with gently sloping banks and shores. If water tracts constitute a small part of Africa anyway, the select localities that suit the crocodile represent a still smaller fraction. Equally to the point, a human population whose explosion of numbers has scarcely started on its full demographic momentum will generate disproportionately greater pressures on crocodile habitat than on the living space of most other major forms of African wildlife (with the obvious exception of the hippo). Even with tighter regulation of the international trade in crocodile skins it is hard to see how the crocodile can survive in the wild, except in such few parks and reserves as persist. All the more timely, then, is Pooley's book, replete with scientific information, and with innovative ideas.

Norman Myers,
Consultant in Environment and Development