

Protected Areas of the World: A Review of National Systems, compiled by the World Conservation Monitoring Centre and IUCN, in co-operation with British Petroleum.

Volume 1: Indomalaya, Oceania, Australia, and Antarctic (1992, ISBN 2 8317 0090 6, 372 pp., HB £25, \$US50); **Volume 2: Palaearctic** (1992, ISBN 2 8317 0091 4, 584 pp., HB £25, \$US50); **Volume 3: Afrotropical** (1992, ISBN 2 8317 0092 2, 384 pp., HB £25, \$US50); **Volume 4: Nearctic and Neotropical** (1992, ISBN 2 8317 0093 0, 400 pp., HB £25; \$US50). Full set of all four volumes (special discount price) ISBN 2 8317 0094 9, £75, \$US150

The new four-volume directory is a world-wide survey of protected area systems. It is organized into national accounts, each comprising a description of the national protected area system, accompanied by a summary list and map of protected areas. It aims to provide extensive background information on the protected area systems of the world and to stimulate the continual process of review and update of information on protected areas. This essential reference is available from IUCN Publication Services Unit, 181a Huntingdon Road, Cambridge CB3 0DJ, UK. Prices do not include postage and packing.

Reef: A Safari through the Coral World by Jeremy Stafford-Dietsch (Headline, London, 1991, ISBN 0 7472 0381 4, 200 pp., HB £16.95) and **Oceans: A Mitchell Beazley World Conservation Atlas** (in association with IUCN—The World Conservation Union, 1991, 0 85533 923 3, 200 pp., HB £19.99)

The oceans and their coastal margins are finally making it into the popular press, the com-

plexity of the environmental problems that they face perhaps explaining the lag behind interest in tropical rain forests. If any issue is going to grab the public's attention, it must be fears about the future survival of the world's coral reefs.

Jeremy Stafford-Dietsch's book is a personal view of these remarkable ecosystems, his photographs alone providing proof that reefs are worth saving. Most of the book is taken up with a photographic 'safari', illustrating the amazing diversity, colour and behaviour of reef animals and plants, from the humble sponges to the impressive sharks. The photos are accompanied by expanded captions, often containing vivid reminiscences about the author's diving experiences.

Preceding the safari is a section on the natural history of and the main threats to reefs. Unfortunately, this must have been written when information on the potential impact of global warming on coral reefs was at its most confused. Undue emphasis is placed on the threat of sea-level rise and the phenomenon of coral bleaching (corals often expel their symbiotic algae if the sea temperature rises), and there are a number of incorrect facts, such as the usefulness of reefs as a carbon dioxide 'sink'. At the 7th International Coral Reef Congress held in June this year (1992), a general consensus was reached that the main threats at present are from direct human pressure, notably siltation from increased soil run-off, nutrient enrichment from sewage discharge and fertiliser run-off, and over-exploitation. Global warming will indeed have a serious impact, if predictions are correct, but it will be on a much longer time-scale than the changes that are occurring now; if we don't halt some of

the damaging activities, there may be very few healthy reefs left to suffer from sea-level rise or high sea temperatures.

Mitchell Beazley's Atlas has a rather more ambitious aim: to provide a global overview of the oceans and human impact on them. In a general sense, it achieves this and will thus make a useful addition to libraries, and the striking photos will give it a place on coffee tables. It is a sequel to the production on forests, but how useful the Atlas concept is for oceans is debatable. Perhaps the required focus on maps explains some of its unsatisfactory nature. A huge amount of information has been plotted on each of the regional maps: tourist centres, pollution, ocean currents, marine protected areas, coral reefs etc. The accuracy is variable – for example, the map of the Arabian Sea shows four marine protected areas in Iran but none of the very much better implemented and managed areas in other countries in the region. The accompanying text is unfortunately not to a standard format, so that comparison between regions is difficult, and a number of topics that one might expect to find do not seem to have been covered, such as major international oil pollution conventions (the poorly compiled index does not help).

Neither book professes to provide solutions to the oceans' problems, but it is disappointing that management of reefs and other marine resources gets such poor coverage. The reef book advocates an old-fashioned prescription for protection, suggesting that 'considerable tracts of reef must be forbidden to any humans' and lamenting the fact that many reef conservation projects are at a local level. Reefs have always been used by humans, and

demand for their resources is greater than ever. There is a role for areas that are strictly off-limits, but most reefs should be, and with the right approach could be, managed by the people who depend on them.

This point is made strongly for the marine environment in general throughout the Atlas, but the section on 'The challenge of conservation' is so general and theoretical that it gives little impression of what is happening on the ground, despite the many innovative, interesting and potentially successful approaches to management being used. The IUCN's Marine programme is barely mentioned, despite its involvement in successful projects, such as Oman's coastal zone management plan. Descriptions of case studies would have been useful, such as marine parks that are working, efforts at community management of marine resources, and how and why international and regional treaties are so important for the marine environment. It is hoped that the important topics and problems raised in both these books will stimulate the appearance of other publications showing possible solutions.

Sue Wells.

Mammals of the Neotropics, The Southern Cone, Volume 2 Chile, Argentina, Uruguay, Paraguay, by Kent H. Redford and John F. Eisenberg (The University of Chicago Press, 1992, ISBN 0 226 70682 6, 430 pp., SB £31.50, \$39.50)

This is the second volume of a planned three-volume work, which will be the first complete account of the mammals of South America. The first volume dealt with Panama, Colombia, Venezuela, Guyana, Surinam and French Guiana. This volume covers the 360

mammal species of Chile, Argentina, Uruguay and Paraguay. The area is physically diverse, dominated by the Andes Mountains but also including areas of desert, steppe, dry forest and temperate rain forest. The book has chapters for each mammalian order, each starting with a diagnosis and comments on reproduction, information on distribution and a discussion of history and classification. The chapter is then subdivided into sections for families, genera and species. For each subdivision there is a diagnosis or description, information on distribution, life history and ecology and, for species, a table of measurements and a distribution map. Chapters also include detailed reference lists. The book finishes with chapters on mammalian community ecology and the effects of man. The result is an excellent and very comprehensive account. It will be of value to a wide range of people, from taxonomists to lay readers. It is well illustrated with useful skull drawings, and black-and-white and colour plates depicting a selection of mammal species. The only disappointment is that there are not more of these excellent plates. This book is a must for anyone with an interest in South America and it is very keenly priced. I await with great interest the publication of the third volume in the series, which will cover the mammals of central South America but, apparently, this work is still in its early stages.

Simon Mickleburgh.

Fishes of the Great Basin: A Natural History, by William F. Sigler and John W. Sigler (University of Nevada Press, Reno, 1992, ISBN 0 87417 116 4, 448 pp., HB £30)

This volume is one of a series

covering various aspects of the natural history of the Great Basin in Utah, Wyoming, Idaho, Nevada, California and Oregon in the United States. The book begins with chapters on the Great Basin drainage area, a history of fishing in the area, the Endangered Species Act and desert fishes, the evolution and classification of fishes and fish biology and ecology. There follows a key to the native and introduced fishes of the area. The main part of the book is a detailed account of over 90 species that occur in the Basin. For each species there is an account of its economic importance, its range, a physical description, and information on size, longevity, food, feeding patterns, breeding habits, limiting factors and habitat. A final section on the preservation of the species relates mainly to the importance to the fishing industry. Rather confusingly there follows an annotated checklist containing more information for species already described in the main species section. The book finishes with appendices on the established fishes of the Great Basin and a list of fishes mentioned in the text that do not appear in the first appendix or the annotated checklist. A small number of species are illustrated with colour plates.

Overall, the book is confusingly laid out with information on species appearing in a number of places. Information on the conservation of endangered species is very limited. In the preface the authors stress that the amount of information presented for each species is directly proportional to its economic and ecological importance. Little-known highly endangered and localized species may thus receive scant attention. The book is heavily slanted towards the fishing