

was to make mining in national parks more acceptable to public opinion I doubt if it will get them very far. In contrast, *Eryri, the Mountains of Longing* will be a powerful voice for conservation. It would do a lot more if it could now appear in paperback and so reach a much wider public.

WILLIAM CONDRY

Conserving Life on Earth, by David W. Ehrenfeld. OUP, £4.50.
Ecological Principles for Economic Development, by Raymond F. Dasmann, John P. Milton, and Peter H. Freeman. Wiley, £2.

Here are two more books to add to that groaning shelf marked Conservation, and as the pile grows larger the niches to be filled become harder to perceive. Both are concerned with a very broad definition of conservation, but otherwise bear little similarity. Ehrenfeld's text belies his title, for virtually all his examples refer to vertebrates—he devotes only 2½ pages to plants, considered *per se* rather than as habitat for vertebrates, and is virtually silent on invertebrates. This seems to be the result of the characteristics he deduces for a typical, if hypothetical, endangered species: it must be a large predator, provide valuable products, and be hunted in areas where no effective game management exists. It is easy to see how discussion becomes restricted to vertebrates, but any conservationist could mention many endangered organisms with none of these characteristics.

The book is most valuable for its clear exposition of a wealth of largely depressing case-histories, building up a picture of the problems facing conservationists. Unfortunately, he has frequently had to rely on hearsay evidence, perhaps a reflection of the resources available for the study of endangered habitats, and some of his figures are, to say the least, puzzling.

But though his book is a powerful, impassioned, and well-written plea for conservation, it scarcely justifies its description (page 334) as 'many pages of "objective" scientific writing'. Much of it is extremely subjective, and it is in the early chapters, where he gives the scientific background, that the presentation is least clear. He claims, for example, that the stability of eco-systems depends on their diversity (a still unproven proposition, as he recognises later, on page 257) and that, therefore, climax communities are the most stable; but later he talks of 'fragile climaxes'.

Though readable and well documented, with much to recommend it, the book's title is ill-chosen and it falls between two stools, for it preaches very much to the converted without perhaps adding greatly to their knowledge.

Ecological Principles for Economic Development, however, is a most welcome addition to the literature, delineating clearly both the essential similarities of aim of economists and conservationists ('the rational use of the earth's resources to achieve the highest quality of living for mankind') and the compromises necessary where these aims are attained by different routes.

After two introductory chapters, the bulk of the book is devoted to consideration of the implications of development in five areas: humid tropical lands, pastoral lands in semi-arid and sub-humid regions, tourism, agriculture, and river basins. Inevitably there is some overlap, and the specialisation the headings imply means that certain currently contentious areas where economic development and ecological considerations appear to conflict have been omitted (for example tundra areas), but the scope is still commendably broad. It is essentially a realistic book, intended for use by practising ecologists involved in development programmes, for whom it will be invaluable. It should also become required reading for all interested in conservation—even if they only read the very sensible chapter summaries which take up the first 14 pages.

Published on behalf of IUCN and the Conservation Foundation, it is to be hoped that they will follow the pointers set out by this book and sponsor further such ventures until every developer is apprised of the need for ecological awareness and every conservationist of economic constraints.

ALASTAIR FITTER

The Arena of Life: the Dynamics of Ecology, by Lorus and Margery Milne. Allen & Unwin, £5.25.

So many books with similar titles to this one have turned out to be vague and imprecise accounts of some aspect of animal life or human destiny, that one approaches another with some misgivings. However, it soon becomes clear that this one is emphatically not in this category. Fifty years ago, when titles indicated with stark reality what a book was all about, it might have been called 'The Plain Man's Guide to Ecology', and it will be hard to better it in this role.

The book is, of course, of American origin and was planned, prepared and produced by Chanticleer Press, New York, who are to be congratulated on such a splendidly produced work. The authors, a man and wife team of biologists who have twenty-eight books already to their credit, deserve no less praise for their part. Skillfully compressing the essentials of a dozen disciplines, ranging from climatology to biogeography, they give first a concise, up-to-date but understandable account of the principles of ecology. The theory is applied to practical examples from today's environmental problems, especially in making clear that the time factors in natural cycles no longer permit us to dump more wastes into the environment than they can accommodate. Important chapters on the population explosion and on ecological awareness bring the chapters into focus for all of us.

To readers of this journal the second half of the book, dealing with the ecological communities of the seas, fresh waters, soil, forests, grasslands, deserts and polar regions, will probably be the most interesting. Drawing on their wide experience of six continents, the authors give fascinating and up-to-date information on the problems facing each ecosystem in the circumstances of the modern world.

The illustrations are outstanding, well selected for the topics they enlighten and excellently reproduced. At the end of the book is a summary of modern zoological classification, a good glossary and a comprehensive bibliography. It is a book that one would like to see in every school library as well as on the table of everyone who feels that what is happening in the natural world is of no concern to him or her.

JOHN CLEGG

Conservation, edited by A. B. Costin and H. J. Frith. Penguin, A\$2.20.

Two hundred years after Cook's discovery, Australia still fascinates the observer and especially the biologist. But Australia is not an outdoor museum, it has a thrusting, exuberant, dynamic economy, hell-bent to exploit all available resources. Fortunately, throughout the world, there is an increasing realisation of the fragility of our environment, despite its resilience, and the need to stabilise the population, re-cycle materials and ensure that all economies have an ecologically sound basis. As the editors plead, the environment should not be a by-product of our business activities, but these should be consciously adjusted to provide the type of living conditions we desire. It is reassuring that most States and the Commonwealth have taken, or are considering, action against pollution, but a co-ordinated approach to resource use is badly needed. Under Australian