

The Appalachians are one of the oldest mountain ranges in the world, the 500-million-year-old, worn-down stumps of what may once have been a majestic range of peaks stretching from the St. Lawrence southwards into Georgia. In at least two places, the White Mountains of New Hampshire and the Great Smokies of Tennessee, they do look like the popular conception of mountains; in between their summits are more modest. Their natural history has three special features: a remarkable variety of deciduous trees, of salamanders and of wood warblers (the North American family Parulidae). This book should interest even those who do not know, and have no prospect of visiting the Appalachians.

RICHARD FITTER.

Origins of American Conservation, by **Henry Clepper**. Ronald Press, New York, \$4.50.

This is another of the modest books of reference edited by Henry Clepper for the Natural Resources Council of America. One could say there is nothing new in this book, but there is no other publication which has gathered together the inspiring collection to be found here. Twelve authors have written essays on the origins of American conservation in the several fields of wildlife, forests, soil, fisheries, water, range, national parks, wilderness and scenery. Throughout we see, in a country where exploitation of a bountiful heritage of natural resources has been of the greediest and most squandering, that a few men of good will and great courage and persistence have managed to turn the public attitude towards conservation. Marsh, Olmsted, Muir, Roosevelt, Pinchot, Mather and some brave politicians who acted like statesmen: it is an amazing story which we in Britain should know and understand better. Individualistic and anti-social efforts to grab what is left are not yet dead, but the public and official attitude is firm. Each of the fields of natural resources mentioned above had its own battles to fight, but the tendency now is to see how closely the fields are related, and conservation effort today is closely co-ordinated.

F. FRASER DARLING.

Tomorrow's Countryside : The Road to the Seventies, by **Garth Christian**. John Murray, 35s.

The future of our countryside, as HRH the Duke of Edinburgh says in his foreword to this book, is one of the most urgent and difficult problems that must be faced to-day. Conservation has moved far away from the ideas of forty years ago, when the CPRE and the first of the county naturalists' trusts were formed and country-lovers were primarily concerned with preserving attractive scenery and protecting rare plants, butterflies and birds. To-day conservation is more an attitude of mind that sees man's very survival as dependent on the wisdom and restraint with which he uses the earth's natural biological resources to provide a suitable habitat for himself.

Yet the old meaning is still widely prevalent, and Mr Christian sees the source of the trouble as the fragmentation of modern life, whereby various interests remain indifferent to important national issues considered to be outside their own province. The tragedy is, as he says, that "to a hard-working clerk at County Hall, nature conservation may appear to be no more than the hobby or pastime of a minority, like basketball or bowls."

This book should be compulsory reading for all such hard-working clerks and for everyone who cares or should care for the countryside and, indeed, man's survival. It presents an impressive amount of factual information, in a pleasing style, about all the pressures on the land of Britain resulting from the increasing size and prosperity of the population and the development of science and technology in agriculture, industry and transport. There is an outstanding series of apposite photographs, a comprehensive bibliography and an excellent index.

The author does not take too gloomy a view of the future. In particular he sees rays of hope in the work of the county naturalists' trusts and in education. "Our schools and universities are the only force that can transform successive generations of young people to be vitally aware of their surroundings and to use them wisely." He concludes "Every year it becomes evident that many more people *do care*." This book should do much to add to their number.

JOHN CLEGG.

Complete Atlas of the British Isles. Reader's Digest, 75s.

This superb production, complete with a foreword by Admiral of the Fleet the Earl Mountbatten of Burma, KG (why does nobody believe nowadays that good wine needs no bush?) is the atlas to end all atlases of the British Isles. It covers the whole of the British Isles, including all Ireland, the Isle of Man and the Channel Isles, and gives a staggering amount of geographical, topographical, historical, climatic, biological, demographic, sociological, agricultural, economic and other miscellaneous information, together with a gazetteer which even gives my own village in the Chilterns, so it must be good. The task of assembling, digesting and arranging this vast mass of information is such a remarkable achievement that it seems a great pity that the publishers have not seen fit to acknowledge the contributions of the writers and editors. What a pity, too, that the distinguished naturalists mentioned in the long list of consultants were apparently not shown the proofs before publication, for they would hardly have passed such statements as that the orange tip is the earliest spring butterfly, that the rare *diapensia* (whose single British site is in West Inverness-shire) grows in Sutherland or Caithness, or that the peregrine "chiefly hunts woodpigeon and red grouse." And a good many other statements could have been phrased more accurately.

RICHARD FITTER.

Animal Conflict and Adaptation, by J. L. Cloudsley-Thompson.

C. T. Foulis, 42s.

Like the scholar gypsy, the author travels far at a learned pace, exploring the whole field of man's wisdom and giving us glimpses of the country of his scientifically trained mind. His argument is that adaptation through conflict for food and living space is as beneficial as it is inevitable.

He opens by discussing life where it began in the sea. Conflict in the littoral habitat resulted in respiratory independence of the sea, and so to a terrestrial life; and eventually, for some animals, even harsh desert conditions. The book is packed with fascinating incidental information: the camel does not store water in its hump; there are black earthworms in the snows of Kashmir and Kilimanjaro; jumping spiders can live at 22,000 feet; some centipedes drop a leg which writhes and squeals all on its own while its owner makes off on the other (uneven number of) legs in another direction.

Without inter- and intra-specific conflict an important aspect of natural selection would vanish; and the lethal viruses and bacteria play an essential part in the ecological scheme of competition and adaptation. It is quite anthropocentric to regard cannibalism even among human beings as abhorrent; or, in animals, as "an expression of the lowest depths of utilitarian turpitude." After all it is one way of controlling population, although less effective than man's looming alternative of nuclear conflict, which in 2000 A.D., the author reminds us, will provide a lot of space for the survivors of the possible 5,000 million people—that is if they survive the radioactivity. The author pleads for the conservation of natural fauna which are often more productive of meat than introduced domestic breeds,