

University in Montreal and solemnly rejected as theologian, scientist and philosopher. Huxley, then a visiting Professor at McGill, was given an opportunity to speak and, in a spirited intervention in favour of Chardin's life work, gave a brilliant example of one of his own most engaging characteristics—his readiness to back a friend in time of need. This same quality has led him to support wholeheartedly causes and movements which he has once espoused, and chief among them the conservation of nature. He himself declares over-population and its dire consequences to be his King Charles's head, and he was quick to foresee and predict how serious these consequences could rapidly become. He gives many telling examples of them as he takes us about the world in this book.

The fortunate decision to appoint Sir Julian as the first Director General of UNESCO (into whose title as a piece of pre-natal influence he had managed to inject the 'S' for science) ensured that 'his passionate interest in conserving wild life and natural beauty' would, in spite of opposition and difficulties, become accepted internationally as part of culture and progressive humanity. An important step was the establishment of the International Union for Conservation of Nature (IUCN) as an agency affiliated to UNESCO.

In a life which has embraced a bewildering range of activities, conferences and journeys such as few men have the physical or mental energy to undertake, Sir Julian has had the opportunity and found the time to visit a variety of areas, abroad and at home, extensive sites of special scientific interest and importance, which few naturalists and ecologists even in these days of easy travel can have surpassed. Nothing can have given him more pleasure than to see the fruits of his handiwork in so many places, and the descriptions of successes, and even of opportunities lost or waiting to be seized, run like an unbroken thread, for readers of *Oryx*, throughout this book. In matters of wild life and the conservation of nature generally, it is impossible to be optimistic. But if neither optimism nor pessimism are, as we are told, valid categories of thought, on a realistic view, we are bound to learn the lesson of this book and say that their future lies with Man now that he has gained such immense power over Nature.

HURCOMB

World National Parks: Progress and Opportunities. Compiled by Jean-Paul Harroy, edited by Richard van Osten. Hayez, Brussels, \$10.00.

A total of 49 authors, many of them the big names of conservation, wrote this book. It is the brain-child of Jean-Paul Harroy and was timed to mark the Yellowstone centennial. The chapter headings are both enticing and embracing, for they mention history, the general principles, the world situation, scientific research, tourism, economics, management and AD 2000. All in all, with the authors coming from 21 nations, it would seem a most excellent package, with its 394 pages wrapped up in a 'plastified cover' for a mere 10 dollars.

Reading the book is less satisfactory. The authors were each given their brief but were frequently lengthy in getting down to the particular subject accredited to them. Presumably no author saw any other contribution before he made his own, and there is much repetition of concept, of sentiment, of advice. A quantity could have been deleted to tighten up the material, quite apart from the removal of obvious statements, such as: 'How often do we forget about the damage done to frequently delicate land or water ecosystems by the multitudinous floods of visitors!' Do we ever? More important, does anyone who is likely to pick up this book?

A difficulty for dignitaries, for the president of this or that conservation

body, is that they have to produce words so often on much the same material. They have to plagiarise themselves, time and time again, and some of the material in this volume does not even pretend to be original. A trouble for editors is that, having commissioned a piece from a hectic expert, and having actually received it (plainly not all those invited to contribute did so), they are somewhat loathe to see weaknesses, let alone prune or excise them. It was easy to wish that a few of the better contributors (Holdgate on the poles, Curry-Lindahl on Africa, Owen on management) had each written a greater share. And, alas, vice versa. Does Coolidge, for instance, really believe, as in his first sentence, that carbon-dating is useful for human remains two million years old?

The translation, which must have been a considerable problem, has been well done (by John Riddell and E. S. Tew). Occasional slips, such as two lines about East Africa referring to 'Lake Manyara', 'Nakura' and 'Aberdan', are probably uncorrected printer's errors. As with any volume to which I will refer, and I will certainly do so with this one whatever its inequalities, it is always distressing to find no index. Curses upon that omission, for there are good facts in this book, embedded, hidden, lurking silently. Much like a day in a national park, there is considerable visual repetition dotted with intermittent fragments of excellence.

ANTHONY SMITH

Alaska and its Wildlife, by Bryan L. Sage. Hamlyn, £2.50.

Arctic Life of Birds and Mammals, by L. Irving. Springer-Verlag, £7.50 (\$14.00).

The first of these books about the life of Arctic and sub-Arctic regions is by an ecologist employed by British Petroleum to assess the ecological implications of oil developments in the Arctic and, in particular, those relating to the trans-Alaska pipeline; the second is by the Professor of Zoophysiology at the University of Alaska. They are complementary and between them give a good account of the fauna and its problems, although written at slightly different levels.

The first is the more popular, well illustrated, and likely to appeal to anyone from the age of about fifteen. After a description of the region the author deals with conservation and development (incidentally, the theme of IUCN's triennial General Assembly in 1972), the Arctic Slope and the Brooks Range, life in the forest, the Alaska Range and Chugach Mountains, and the coasts and islands. In its history Alaska has seen men come and go; in the south-east, onion-domed churches and place names such as Baranof and Petersburg reflect 125 years of Russian possession; in the south-west there are disintegrating military relics from the brief Japanese occupation, and elsewhere there are ghost towns and mines established during gold-rush days. But, with few exceptions, the fauna has remained unimpressed—so far. As both books show, the Arctic ecosystem is a fragile one; the tundra can carry the scars left by the passage of even a single man, let alone a heavy vehicle, for many years. Animal populations are resilient, up to a point, but the IUCN *Red Data Book* includes Arctic mammals and birds that are threatened with extinction.

Professor Irving's somewhat more academic book (no photographs!) seeks to explore the nature of Arctic mammals and birds and the adaptations which they have had to undergo in order to live there for at least part of the year. Many of the questions he has to ask are not yet answerable; even apparently simple information is not available. One of the worries of the proposed trans-Alaska pipeline was that it would form a barrier to migrating animals, in particular caribou. Only in the past few months has it