

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

proved a groundless anxiety—the animals merely jump over the obstacle.

This is an absorbing book not only for the great deal that it has to say about migrations, fur, feathers, the temperature of sleeping men and the use of clothing, but also because the author appears to be musing on paper. It is intriguing and delightful to find such candour as in his remark about the cooling of titmice at low temperatures: 'But I would not know how to examine a physical system in which all three factors in the equation comprising temperature, heat and insulation were changing'.

JOE LUCAS

**The Long African Day, by Norman Myers.** Collier-Macmillan, £5.95.

The prospective purchaser would be misled, if he thought this was yet another 'coffee table' production on that continent. The pictures indicate the quality of the camera work, but there the comparison with other lavishly illustrated books, many of which become skeletons if the photographer's art is removed, must end. Take away the excellent photographs from this work and only the skin has been removed, exposing muscle and fat of considerable import.

Norman Myers lives in Kenya and is much travelled throughout East Africa, where he has among other things undertaken ecological surveys for IUCN on the status of the leopard and cheetah, as *Oryx* readers know. His own experience, coupled with an intimate knowledge of the work carried out by other scientists in East and Central Africa, has resulted in an excellent compendium of the wildlife scene. Full recognition is given of the work and observations of many researchers and the bibliography shows the wealth of scientific experience that he has drawn upon. Every major 'problem' from poaching to elephant overpopulation is dealt with sincerely and with great objectivity.

In the final pages the author says, 'This book is not a polite plea for wildlife. There have been dozens of those in the last ten years, and if there were scores every year—given the progress that has been achieved so far—they still would not meet a fraction of what is needed. Because there is no other measure: what matters is not whether a lot has been done, or a lot more than a lot, but whether it is *enough*'.

This book should be read by all those who have a feeling for the wildlife of Africa. It will increase their own knowledge whilst providing the answers to the many questions posed by the unconverted.

R. J. WHEATER

**Okavango Adventure, by Jeremy Mallinson.** David & Charles, £3.25.

This account of an animal-collecting journey to Africa fulfills the first requirement of any successful book—it is eminently readable. From the time the author leaves Tilbury, with masses of luggage and a pair of European red foxes destined for Pretoria Zoo, until his return to Heathrow, with a varied collection of African specimens, we are interested in his progress, sympathise with him in his failures and rejoice over his successes.

His modesty, revealed in humorous, self-deprecatory accounts of his adventures, gives the book a universal appeal. Not only does his sincere love of animals become apparent, but also his love and understanding of people—a quality sometimes missing from books of this genre. We see this most clearly, perhaps, in his amazing relationship with the lion, Chinky, and in the affectionate rapport between the author and John Carpenter, the African who was trained to build cages and feed animals.

With pace and infectious enthusiasm, Mallinson describes how 'the