

up suspense, and without the incidents maturing from anecdote into something grander. This work is best as a general introduction, not to the people but to the high ranges and natural history of the area, to the bizarre botany of the mountains of the moon.

Rennie Bere ended his time in Africa as Chief Warden of the Uganda National Parks. This was obviously a crowning happiness to his career, for the book implies that all three decades were of contentment with the final time at Mweya best of all—apart from those many scramblings uphill. His short book is written smoothly, the facts are affectionately recounted, and one wonders how the author can now bear to live at Bude, Cornwall. It fills even a reader with a desire to go back to those parts where he used to live.

ANTHONY SMITH

The African Lion, by Mervyn Cowie. The African Elephant, by Rennie Bere. Barker, 21s. each.

Mervyn Cowie, formerly Director of Kenya National Parks, who has done more than anyone else to establish National Parks in Kenya, examines the lion's life history, foibles and fables. The first section of the book deals with the life history, the lion's place in the African scene and relationship with its prey, the animals that depend on it for food, those that fear it, and those, from the enormous elephant to the diminutive ratel, who fear it not. The second section concerns its relationship with man, from man-eating to marauding, to lion men (and women) and witchcraft. In both sections the author very properly debunks a number of well-known "facts".

Rennie Bere, formerly Director and Chief Warden of Uganda National Parks, sets out the life history of the elephant in a similar manner, and manages to condense a wealth of information about his subject into a short and readable account, with many keen observations made by himself during his years of close association with elephants. He, too, disproves many a well-known "fact." I was pleased to see how much stress he puts on the thorny subject of population control and management of habitat if this delightful and interesting animal is to survive this modern age.

Both books are illustrated with excellent photographs in colour and black and white, and the elephant book is also enhanced by a very good reproduction of a David Shepherd painting. They are first-class value for readers of all ages and highly recommended.

R. J. WHEATER

The Land and Wildlife of South America, by Marston Bates, and Tropical Asia, by S. Dillon Ripley.

Time-Life International, 32s. 6d. each.

South America is a continent of immense wildlife variety and Marston Bates's book is a magnificent introduction to it, a masterpiece of lucid compression, beautifully illustrated and interesting from beginning to end. To many English people South America is just the Amazon. The Orinoco-Amazon river basin is an enormous inland sea, gradually rising and turning into a huge freshwater river system. To this the inhabitants must accommodate themselves, and so we find skates and rays in the rivers, freshwater dolphins, and mammals which take readily to the water. When floods come, all life must swim, climb or perish.

In the continent's long period of insular isolation, until two or three

million years ago, a quite extraordinary fauna was able to develop, marsupials and placentals, huge ungulates and carnivores—all the early carnivores seem to have been marsupials which have vanished. Then, in the Pliocene, came the formation of the Panama isthmus and with it an influx of animals from the north. But always the warm, wet, green forest with its boundless opportunities for mammal, bird, reptile, insect and plant, layer upon living layer, ascending into the vast canopy of the trees.

Dillon Ripley's book is the first chance the non-scientific reader has had of considering South-east Asia as a coherent whole. He has touched upon almost every aspect in which most of us will be interested, and treated it with clarity and brevity. Birds, beasts, and human activities are described, and habitats such as forests—and the mud. In eastern Sumatra alone there are 60,000 square miles of coastal marsh, much of it overgrown with mangrove, itself of great interest, and with tidal flats that are bubbling and crawling with life.

C. L. BOYLE

The Stocks of Whales, by N. A. Mackintosh. Fishing News, 47s. 6d.

A Hundred Years of Modern Whaling, by E. J. Slijper. Nederlandsche Commissie voor Internationale Natuurbescherming. Free from FPS, 8d postage.

In February 1864 the first whale catcher equipped with an efficient harpoon gun left the Norwegian port of Tonsberg and the modern era of whaling began. Whalers could now go after the larger and faster blue and fin whales, rather than the slower right whales or sperm whales which were the quarry of the old whalers, who had succeeded in reducing the northern stocks of right whale to near extinction. The history of the last hundred years has shown that their modern successors have been little more successful in making a rational use of one of the major natural resources.

Both Dr Mackintosh's book and Professor Slijper's article describe the background of that history, starting with a general description of the biology of whales and following through to the recent activities of the International Whaling Commission. Naturally Dr Mackintosh covers rather more ground than was possible in Professor Slijper's shorter and more popular article; in particular he deals quite extensively with the population dynamics of whales. This aspect of whale biology and especially the potential sustainable catch, which is determined by the excess of births over natural deaths, is the immediate central scientific problem in the management of whale stocks. It is therefore particularly welcome to see this subject given Dr Mackintosh's full description especially as it has been largely neglected in previous books on whales, including Professor Slijper's own and otherwise admirable volume. Too much blame for earlier failures to manage the whale stocks properly should not be attached to the industries and governments; as early as 1924 the Discovery Committee was set up by the British Government to provide the necessary scientific advice for proper management. The tragedy has been that it has taken some forty years to show that the interest of whales and whalers are not incompatible, and that, properly managed, whale stocks can sustain large annual catches, and still thrive. Unfortunately, the major stocks in the Antarctic have been so depleted that to build them up will require severe restrictions of catching, which is against the short-term, but not the long-term, interest of the industry. However, the countries concerned have