

Elephants of Uganda

Elephants and their Habitats: the Ecology of elephants in North Bunyoro, Uganda. By R. M. Laws, I. S. C. Parker and R. C. B. Johnstone. Pp. xii+376. (Clarendon: Oxford; Oxford University: London, July 1975.) £15.

THIS is ecology on a grand scale. The stage is the 1,200 square miles enclosed on the west by Lake Albert and on the north and east by the great sweep of the Victoria Nile from Lake Kyoga to Pakwach. Elephant biology dominates the action, but the book encompasses the whole environment, one in which the changing scene is governed by the population dynamics of the elephant and man's relationship with these animals—in competition or conservation.

Before World War II, and for some years after it, information about elephant populations was plentiful but usually wrong. The most experienced game wardens and hunters had totally inadequate ideas about elephant numbers and movements, especially in the tall grass and forest areas such as Bunyoro. Advance has come with the development of the National Parks, and with the expansion of air travel and the use of aerial surveys. Richard Laws, a Cambridge zoologist, was foremost among the pioneers who applied modern ecological methods to populations of large mammals. He came to Africa after working on whales and seals and has since returned to his Antarctic studies, so that one may suppose him to be attracted by the big beasts and the romance that attaches to them. His approach, however, is matter-of-fact and his research is distinguished for its intellectual rigour allied to a grasp of administrative and economic problems. In this book he is assisted by a wildlife manager who was born in

East Africa and a forester who has been particularly interested in the Bunyoro district. The result will serve not only as a mine of information but also as a model of what a study of this sort can embrace.

This book is not about all "Elephants and their Habitats". The subtitle perhaps more strictly describes the content, but it is undeniably relevant to all elephant management. I think it is safe to say that there is no other mammal population in which growth, nutrition, habits, reproduction, age structure and behaviour has been so thoroughly studied in relation to climate, flora and fauna and land-use of its habitat. In north Bunyoro, "by mutual agreement between the individuals, departments and companies involved, all the relevant information has been pooled to form the basis of this book".

There are no adventure stories of life on safari here, and this is not a 'coffee table' volume. It is true practical science, an authoritative account, detailed and for practical purposes complete, for the use of students and the guidance of administrators. After reviewing the history of the region and man's use of it, the authors describe its flora and fauna in some detail before embarking on six chapters of elephant biology. There follows a chapter on the changes in habitat associated with past management and a cropping programme involving both elephant and hippo. In the final chapter the authors put forward recommendations based on their analysis of the ecological factors involved—recognising aesthetic and cultural considerations, but regarding economic considerations as "of overriding importance". Many will judge this book indispensable. **John S. Perry**

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