reviews

Zoological collections under fire

R. J. Wheater

The Last Great Wild Beast Show. By Bill Jordan and Stefan Ormrod. Pp. 271 (Constable: London, 1978.) £6.50.

The authors of this book have had considerable practical experience with various aspects of animal management. Their book traces the development of animal collections from the Persian 'Paradise' to the modern specialist collection.

The roles of the zoological collection in research, education, conservation and recreation are identified and the failure of those responsible for such collections to pursue these roles are noted. The capture of the animal in the wild and its progress through local quarantine, transportation by various means to the collection through dealers is examined and the failures highlighted.

The authors then examine the hazards that face the animal that has survived thus far when it arrives in the collection. Examples of poor accommodation, badly designed and therefore stressful exhibit areas, unsatisfactory animal husbandry both with regard to diet and keeper care, are illustrated in a whole series of incidents where things went badly wrong.

The final chapter sets out to justify the retention and development of specialist collections; the best of the existing ones are described; and the abandonment of the mainstream zoo and safari park is recommended.

One of the photographs illustrating this book shows a large collection of Elephant lower jaws collected in the Tsavo National Park in Kenya from the skeletons of animals which died within the Park from natural and unnatural causes, jaws gathered together to obtain age data for scientific investigation into the population dynamics of this species. The authors' caption reads "The fate of the Elephant? Several thousand skulls confiscated from poachers in Tsavo National Park, Kenya". At least the location and the species were accurately identified. The caption to this one picture epitomises all that is wrong with this book—the lack of accuracy. important omissions, a fitting of facts or half-truths to suit the authors' preconceived ideas.

All is by no means perfect in the

way animals are captured and transported, but rules and codes of practice have been instituted by those responsible. The design and construction of animal accommodation and exhibits does not always fulfil the need. How can those responsible be expected to do better for animals than architects and planners can do for the human animal? Those developments which the authors applaud have evolved from a better understanding of the needs, in the same way that something better will, it is hoped, evolve from the era of the highrise flat (tall apartment building).

All animal collections have a potential for the development of serious education programmes and regrettably many have failed to respond to the challenge. There are those who, at no small cost to themselves, have created very professional, fully utilised and highly respected programmes in conservation and environmental education. These efforts are not considered worthy

of mention

The recognition by some zoos of failures and shortcomings in many aspects of animal husbandry and exhibit design led to the publication in 1959 of the International Zoo Yearbook, the establishment of the Federation of Zoological Gardens and, later, the National Zoological Association. These, coupled with symposia and meetings on a wide field of subjects and mutual problems, have gone a long way to alleviating many of the failures and have created a far greater degree of cooperation and coordination of effort. These positive developments receive scant attention from the authors.

Readers of this work should have no difficulty in applying a higher degree of objectivity towards the subject than that achieved by the authors.

R. J. Wheater is Director of the Royal Zoological Society of Scotland, Edinburgh, IIK

Endocrinology annual

The Year in Endocrinology, 1977. Edited by S. H. Ingbar. Pp. 399. (Plenum: New York and London, 1978.)

As the editor states in his preface, with the publication of this second volume in the series the book becomes truly annual. The event is in keeping with its declared objective "to assist interested members of the biomedical community in coping" with "the continuing, incredibly rapid, growth of knowledge in all aspects of endocrinology".

Of the 11 chapters which the book contains, one, Autoimmunity in Endocrine Disease, is defined by the editor as non-recurring, and a second (Vasopressin and Water Metabolism) as biennial. The remaining nine chapters are therefore to be classified as annual and are entitled Hypothalamus, Anterior Pituitary, The Thyroid, Parathyroid Hormone and Calcitonin, The Adrenal Cortex, Aldosterone and the Renin-Angiotensin System, The Ovary, The Testis and, finally, The Sympathoadrenal System.

The individual authors, most of whom are endocrine physicians, have reputedly signed on for a five-year term. They have clearly been given rather loose instructions for the design and preparation of their several chapters, and the overall bias of the accumulated text is towards the presentation and discussion of clinical data. This suggests that the "interested members of the biomedical community" for whom the series is intended were thought of mainly as clinicians.

The book starts with Dorothy Krieger's excellent chapter on the hypothalamus, which is surprisingly up to date considering the rapidly accelerating pace at which new knowledge in this area appears in print. New studies on the pituitary portal system are reported and these are illustrated by diagrams and scanning electron micrographs; these last would perhaps have been better shown in colour translation rather than black and white. Retrograde blood flow from pituitary to brain is envisaged as an anatomical reality.

William Daughaday presents, as always, a succinct functional outline of the anterior pituitary, each division starting with basic knowledge and proceeding rapidly to physiology, phar-