

REVIEW

International Zoo Yearbook — Volume 40

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The management of wild populations of elephants and those under human care is a major challenge for professionals.

At the same time, elephants are the most admired and beloved animals by the general public. This is the level at which welfare discussions are usually conducted.

This makes the new issue of the *International Zoo Yearbook* (Volume 40) a very important professional contribution to scientific knowledge about the situation of elephants under human care, their wild kin, and the human–elephant conflict.

The issue treats the full range of topics, such as status, distribution, biology, human–elephant interactions and implications for conservation of wild elephants.

An overview of the state of wild Asian and African elephants is presented, their role as threatened species is discussed and some proposals for solutions are described. Concerning elephants kept under human care, the topics are reproduction and breeding management, behavioural and hormone monitoring, concepts for welfare, and the correct care and feeding of elephants.

The latest information about wild elephants is discussed in detail in the first two papers. Sukumar summarizes general information about Asian elephants and presents updated facts. Conservation issues are discussed by presenting the main causes for the threat to elephants: habitat loss, the human–elephant conflict and poaching. The article by Lee & Graham, which complements and completes the first paper, relates to African elephants in a very detailed and precise manner. The theme of elephant conservation requires the most attention today. Papers like these are highly welcome; they allow people to better understand the threats that elephants face and also advance proposals to ameliorate the situation.

Besides conservation, this volume contains another relevant theme, namely elephant reproduction. In this context, the paper written by Hildebrandt *et al.* deserves special mention. This article is a must for every elephant manager or vet, written by the experts in elephant reproduction. It contains all the facts worth knowing about elephant reproduction biology, beginning with the anatomy of the reproductive tract of both sexes, followed by ovarian cycles, mating, gestation, contraception and so on. It provides an overview as well as detailed information, practical tips and also discusses reproductive problems. An updated reference book for everybody: concise, clear and informative.

The report by Sdzuy *et al.* contributes to the topic by defining prepartal behaviour patterns in elephants as an indicator for impending parturition.

Population management of zoo elephants, feeding and nutrition in elephants under human care, and a review of injuries caused by elephants complete the variety of topics on elephants in this issue of the *International Zoo Yearbook*.

The approach to discussing welfare concepts by Veasey is a philosophical one.

The reports dealing with rhinos present, as in the elephant section, information about conservation status and strategies, reproductive physiology, behaviour, population management, and feeding. Additional very useful information is provided about operant-conditioning programmes for different rhino species. The very successful EAZA Rhino Campaign is also introduced.

Section 2 presents a great variety of very useful reports ranging from new facility design to successful husbandry methods for species from *Physalia* to chimpanzees.

In summary, this volume is expertly written. The selection of papers covers the key aspects of elephant and rhino management and conservation today. A major attribute is the clear-cut preparation of information. This approach is designed to address the many readers involved in pachyderm research, conservation and management. Upshot: informative, innovative and important.