

Reports and Journals

International Zoo Yearbook, Vol 6, edited by **Caroline Jarvis**. Zoological Society of London, 6 guineas.

Considerable space is devoted to the educational function of zoos in the latest (and largest) volume of this indispensable, well planned and well illustrated reference book. The Education Officer and the Director of the Amsterdam Zoo, in a thoughtful joint contribution on the aims of zoos in education, insist that zoos must not be just "museums of living animals"; their task is "to convince the public of the real importance of animals, of knowing about them and of managing animal life in the wild and in captivity intelligently."

The Conservation section includes an account of the second International Symposium on the Przewalski horse, the 1964 World Register of Père David's Deer by Mr Tong, Director of Whipsnade, notes on the scimitar-horned oryx and the register of those in captivity, and an account of the establishment (not re-establishment as the title says) of a "reserve" wild herd of musk-oxen in south-west Greenland, referred to on page 279.

The Reference section includes for the first time lists of zoo and aquaria federations and publications, and a list of the existing studbooks of rare animals, eight in number: Przewalski's horse, onager, Père David's deer, anoa, European bison, Arabian and scimitar-horned oryxes and addax.

The Meat Production Potential of Wild Animals in Africa: A Review of Biological Knowledge. Commonwealth Agricultural Bureaux, Farnham Royal, Bucks., 13s 6d.

For conservationists this is a matter of the greatest importance, hailed in many quarters as the surest way of conserving at least some species of African mammals. Livestock production is particularly important in Africa because, due to low or erratic rainfall, "at least half the land area is marginal or sub-marginal for crop production"—and also for domestic livestock production. At the same time the continent has "the greatest diversity of indigenous large mammals" anywhere in the world, while in many parts of it "human diet is largely deficient in animal protein and other animal products." This review of what is known about the major biological problems of meat production from the larger African ungulates south of the Sahara is described as "a first attempt to cull relevant data from a diffuse literature," and five authors have tackled the task: Lee M. Talbot, W. J. A. Payne, H. P. Ledger, Lorna D. Verdcourt and Martha H. Talbot. Brief reviews of, for example, distribution of the animals, reproduction, nutrition, domestication, are accompanied by a valuable 16-page list of references.

Animal Species under Protection in Poland, by **B. Ferens**. Polish Academy of Sciences. Obtainable from US Dept. of Commerce, Clearinghouse for Federal Scientific Information, Springfield, Va. 22151, \$6.00.

This 25-page account of the 384 species protected in Poland since the Order of 1952 has been published in the USA in a translation by M. Karsz. Illustrated with photographs or drawings of 182 species, it covers molluscs, insects, fish, amphibians, reptiles, birds and mammals, with descriptions of the species, notes on their status, a bibliography and a useful commentary on some provisions of the order. One regulation protects anthills in forests, and the author points out that recent German research has shown that one not very large colony of some 75,000 red ants cleared one hectare of forest of the larvae of various pests. When this became known there were

even proposals in Poland to enclose the ant hills of red ants with barbed wire to create small "reserves" so that ants could be moved in case of need to clear other areas of forest threatened with pest larvae.

Application of Pharmacological and Physiological Principles in Restraint of Wild Animals, by A. M. Harthoorn. Wildlife Society, Suite S176, 3900 Wisconsin Avenue, N.W., Washington, D.C. 20016, 75c.

This important monograph explains and describes for the non-scientist the principles of drug administration to wild animals, and their physiological reactions. The result of a three-year study to evolve drug mixtures with a wider margin of safety, reduce mortality in capture operations, and simplify the problems of judging weight and body condition, the report covers the principles and techniques of immobilisation in the field, with detailed treatment of individual species, notably elephant, rhino and hippos. The importance of tranquillising and immobilising drugs for the conservation of large mammals is inestimable, and much of the credit for the great strides made in recent years goes to Dr Harthoorn.

The Flamingos on Bonaire, Netherlands Antilles, by Jan Rooth. Rivon, Zeist, The Netherlands, f. 16.

The result of a year's concentrated research by the author and his wife (August 1959-August 1960), this is a detailed account of the habitat, diet and reproduction of the Bonaire flamingos, well illustrated with revealing drawings (of behaviour) and 37 black and white photographs. Flamingos in the Caribbean have decreased considerably in recent decades—the map shows a depressing repetition of the symbol indicating *former* breeding colonies, almost obliterating the few survivors. This research was instituted following the report by Mr J. H. Westermann in 1958, when the Government of Bonaire was already disturbed for the safety of the flamingos. Since then a new threat has arisen in the development of the salt industry in South Bonaire, and one of the projects of the World Wildlife Fund is a Flamingo National Park there.

A Preliminary Report on the Effects of Phosphamidon on Bird Populations in Central New Brunswick, by C. David Fowle. Canadian Wildlife Service.

This report shows that phosphamidon, used to control spruce budworm in forests in New Brunswick after tests had shown it to be less harmful to fish than DDT, was toxic to birds as it was applied in 1964. The birds were incapacitated or killed soon after the spraying took place. But the report emphasises that too little is known as yet about this poison to condemn its use outright. It appears to have no effect on aquatic life, and breaks down rapidly without leaving poisonous residues.

In a paper "Auswirkungen einer Insektizid-Aktion," in *Der Ornithologische Beobachter*, Dr Alfred Schifferli, of the Schweizerische Vogelwarte, Sempach, describes the effects on a bird population of the use of phosphamidon in forests in the Upper Valais.

Mammalian Hybrids: Supplementary Bibliography, by Annie P. Gray. Commonwealth Bureau of Animal Breeding and Genetics, West Maine Road, Edinburgh 9, 20s.

This list of additional references, consisting of 33 duplicated pages stapled together, brings the bibliography of a widely used work of reference up to date. The titles are arranged alphabetically under authors, within orders. In most cases the hybridising species are named when not in the title.