

Reports and Journals

THE INTERNATIONAL ZOO YEARBOOK. Vol. IV, 1962. Edited by CAROLINE JARVIS and DESMOND MORRIS. Hutchinson. 84s.

This useful reference book seems now to have become well established, though this volume is a little on the late side. The reference section is, as always, invaluable, and there are special sections on animal milk analyses and hand-rearing techniques and aquatic exhibits in zoos and aquaria. On the conservation side, three eminent zoo men, van den Bergh of Antwerp, Lang of Basel, and Osborn of New York, write on the increasingly important part which zoos are playing in the conservation of rare species; a special article is contributed from Russia on the preservation of Przewalski's wild horse (see Plate 16) at the Askaniya Nova Zoopark—not more than twenty seem to survive in the wild; and there are contributions on the conservation of sea turtles at a museum in Florida, and the introduction of two African antelopes and the Siberian ibex into New Mexico.

GREY SEALS AND FISHERIES. Report of the Consultative Committee on Grey Seals and Fisheries. H.M.S.O. 4s. 6d.

The grey seal is one of the world's rarer seals, and we in Britain are, or should be, the proud guardians of nearly 80 per cent of the world stock of 46,000. But the grey seal has its enemies. Because of the protests from fishermen on the east coast of Scotland that seals were damaging their catches and nets, the Nature Conservancy set up a Consultative Committee on Grey Seals. Its report has, for the first time, provided data on the population and biology of the grey seal that is both comprehensive and accurate, and for this we can have nothing but praise. On the management and control of grey seals, to reduce the damage they do to fisheries, the Committee recommended a cull or killing of 25 per cent of the existing breeding potential in Orkney and on the Farne Islands, the two colonies from which most of the seals on the east coast of Scotland are believed to originate. Unfortunately, as Dr. J. C. Coulson, Lecturer in Zoology at Durham University, has trenchantly pointed out in the *Journal of Animal Ecology*, the Committee makes no attempt to argue the case for its recommendations, and this would appear to be because the evidence on which they base them does not in fact provide a scientific basis.

The weakest part of the biological data, as the Committee admits, is that relating to the food of grey seals; this leaves us just where we were before, knowing that seals eat fish. To say that seals are damaging fisheries, it is necessary to know either the total population of fish, which is unknown and perhaps unknowable at present, or the catches of the fishermen, data on which are presented here for the first time; these show that neither salmon nor sea-trout catches have declined over the past ten years. Mostly qualitative data are presented on the white fishery. Nets are also damaged, but the figure given, 10 per cent over two years, is hardly sufficient justification for the cull, and the remedy here is clearly research into more resistant types of net, and assistance to the smaller fishermen to replace their old nets.

All conservationists agree that even rare animals must be controlled if they are doing serious damage, but no case has yet been made out that the grey seals, which have admittedly increased, are in fact doing enough damage to justify the culling in Orkney and the Farnes which created so much public dismay when seen on television last December. A better case must surely be made if the culling is to be repeated next year.

Moreover, it is by no means clear why the figure of 25 per cent was chosen. Indeed, since we do not know how much damage is being done how could it be other than sheer guesswork, or perhaps the most the public could be expected to stand? For everything we know about animal populations suggests that, if a flourishing population with an ample food supply is cut back by only 25 per cent it will not stay at that level, but will vigorously breed up to the original level again. The stark choice we probably face, if we really do want to control the population of these seals, is either to cut them down by 50 to 75 per cent, as has happened with various whale populations, which have not recovered, or to continue indefinitely with an annual cull to keep them at whatever level we decide that, once we do have some evidence, they must be kept.

R. S. R. F.

THE PUKU. The Occasional Papers of the Department of Game and Fisheries, Northern Rhodesia, No. 1, 1963. Government Printer. 3s. 6d.

This is the first of a series of wildlife bulletins, to be issued twice a year, to record and publicise the results of the researches and field observations of members of the Department. Any publication designed to increase the knowledge of African wildlife, and thereby to stimulate interest and promote further investigation and conservation, is more than welcome when the future of the Continent's fauna is so uncertain. *The Puku* fills a long-needed want, and it is hoped that it will instil a sense of urgency for safeguarding what is left of nature's priceless heritage. More than half of its 218 quarto pages are devoted to a list of plants collected in the Kafue National Park. Other articles deal with the Lechwe of the Bangweulu Swamps, breeding data on some Northern Rhodesia mammals, Luangwa Hippo, Breeding Seasons of Game Birds in the Rhodesias and Nyasaland, the Gaboon Viper, the Spotted-necked Otter, and weights of some of the larger mammals, the whole supplemented with maps, diagrams, tables, photographs, and bibliographical references: a diversity to suit many tastes. The Short Communications, which terminate this number, should be encouraged, as much can be learned from them. All concerned with the publication are to be warmly congratulated. How true is the Director's lament in the Foreword, about "the aversion which so many workers feel to writing up their results or committing their observations to paper"! Perhaps now this will be rectified. Floreat *Puku*!

C. R. S. P.

THE BADGER IN CHARNWOOD FOREST, by A. E. SQUIRES. **BADGER NOTES, OBSERVATIONS AT A CHARNWOOD SET**, by T. J. WHALL. Hon. Secretary, Loughborough Naturalists' Club, Rockside, The Drive, Woodhouse Eaves, Leics. 8s. post free.

Interest in badgers is now so widespread that regional surveys like this are most welcome, and other local natural history societies should be encouraged to undertake them. Some thirty-nine badger sets were surveyed in this most interesting woodland and moorland part of Leicestershire, of which twenty-nine were occupied. One set was over 100 years old and had at least twenty-five entrances; it is known that the badgers were originally introduced there from Gloucestershire. Man is the only serious enemy of Charnwood badgers; the main hazards are road accidents, digging as a "sport", gassing, consumption of poison put down for other animals, and destruction of their habitat. The authors offer some useful hints on how to watch badgers, an increasingly popular pastime.

REPORT OF THE NATURE CONSERVANCY, FOR THE YEAR ENDING 30TH SEPTEMBER, 1963. H.M.S.O. 11s. 6d.

The Nature Conservancy is now so firmly established an institution that it seems hardly possible that only 14 years ago it did not exist. The current year's report—issued as always with barely credible promptitude—shows again the very wide range over which the Conservancy makes its influence felt, from studies of woodland soil fauna and X-ray spectrography to the status of the polecat and public inquiries into the siting of power lines. Five new national nature reserves were established during the year and four existing ones were extended, among them the 19,000 acre Glenfeshie extension which makes the Cairngorms at 58,822 acres probably the largest nature reserve in Europe. Among the many points of interest to FPS members, one may mention the discovery of fifteen parts per million of dieldrin in the liver of a red kite, a bird of which only fourteen pairs are known to remain in Britain; the fact that on North Rona where the grey seals were not controlled, the decline of 20 per cent in the number of grey seal pups born was the same as in Orkney, where some were officially culled; the remarkable spread of the pine marten in Scotland, which seems to have happened mainly between 1926 and 1946 and now to have slowed up; and the fact that since the myxomatosis epidemic and the prohibition of gin traps the polecat has considerably extended its range in Wales and the Welsh Marches.

THE EAST AFRICAN WILDLIFE JOURNAL, Vol. 1. East African Wildlife Society, P.O. Box 20110, Nairobi, Kenya. 17s. 6d., including postage.

With eight major papers and a number of Research Notes, and bound in hard covers, this well-illustrated new journal is good value for money. The subjects covered include East African Birds of Prey, by Leslie Brown; the Spotted-necked Otter, by J. Procter; the Black Rhinoceros, by the late A. T. A. Ritchie, and the Arabian Oryx, by D. R. M. Stewart. The short notes include an account of the stomoxys plague in Ngorongoro in 1962, a wildlife census on Lake Rudolf, and a recent case of shooting of the rare Arabian leopard. In a paper on the elephant problem in the Tsavo, where too many elephants, helped by the fires of poachers and honey-hunters, have caused great damage in the past five years and a change in the vegetation from dense bush to open country near the permanent water supplies, J. Glover describes the results of the aerial surveys. He estimates that the carrying capacity of the East Park may be some 5,000 elephants, whereas the surveys showed that at times the numbers approached 10,000. Grasses, creepers, and herbs form the bulk of the elephants' diet, even in a normal dry season, according to P. Napier Bax and D. L. W. Sheldrick in a paper on the food plants and feeding behaviour of the elephant; but damage to woody vegetation reaches a peak in periods of drought when the herbs and grasses disappear or have a low food value, while trees and shrubs maintain a relatively high value.

Captain Ritchie, writing on the black rhino, comments on their quite extraordinary agility in relation to their bulk. "They can get off the mark like any Olympic sprinter, turn on a sixpence, and make a polo pony look a clumsy cob. Over a short burst they can reach nearly 30 miles an hour . . . When making a turn at speed they remind one of a cat cornering a building with a dog after it, for their legs are splayed outwards, and they are in very truth 'ventre-a-terre'. A rhino can get along quite well on three legs, while an elephant in similar circumstances is completely anchored."