

# Oryx

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The Society was founded in 1903 as the Society for the Preservation of the Wild Fauna of the Empire, and subsequently named the Fauna and Flora Preservation Society. Fauna & Flora International is conserving the planet's threatened species and ecosystems – with the people and communities who depend on them.

Oryx - The International Journal of Conservation, is now published quarterly by Cambridge University Press on behalf of Fauna & Flora International. It is a leading scientific journal of biodiversity conservation, conservation policy and sustainable use, with a particular interest in material that has the potential to improve conservation management and practice.

The website, <http://www.oryxthejournal.org/>, plays a vital role in the journal's capacity-building work. Amongst the site's many attributes is a compendium of sources of free software for researchers and details of how to access Oryx at reduced rates or for free in developing countries. The website also includes extracts from Oryx issues 10, 25 and 50 years ago, and a gallery of research photographs that provide a fascinating insight into the places, species and people described in the journal.

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except that they appeared to leave the head at a slightly more acute angle and to take a backward turn within  $1\frac{1}{2}$  to 2 inches of the base.

The appearance of the animal was so unusual as to suggest that it may be a hybrid between the Uganda kob and the waterbuck. There were actually no waterbuck within a mile or two but there is plenty of good waterbuck country in the vicinity and in Uganda, at any rate, waterbuck and kob are often seen very close together.

The dark saddle is distinct in Fig. 1, which also shows a side view of the horns and the absence of the double curvature which is so pronounced in the animal in Fig. 2 and in Fig. 3, an ordinary Uganda kob. Figs. 3 and 4 give the front view of the horns of a Uganda kob and a waterbuck respectively. The horns of the aberrant specimen in Fig. 1 resemble those of a waterbuck much more than those of a kob.

## A REPORT ON THE FAUNAL SURVEY OF NORTHERN RHODESIA.

By CAPTAIN C. R. S. PITMAN.

### *Summary of General Conclusions and Recommendations.*

#### *General.*

- (a) There is an abundance of game still left, generally.
- (b) Game on the whole has decreased markedly in recent years. This decrease is progressive.
- (c) Certain species such as buffalo, elephant, and tsessebe have recently increased enormously.
- (d) In spite of the continuance of lechwe drives and other methods warranted to inflict heavy wastage there is no apparent decrease in the lechwe hordes.
- (d) 1. Excluding the lechwe the wild ungulates average about two to the square mile, the human population approximately four.

*Elephant Control.*

(e) There are at least 12,000—probably many more—elephants in Northern Rhodesia.

(f) Elephants are increasing with alarming rapidity.

(g) On the whole the elephants are responsible for relatively little damage to property, but the threat, in the absence of organized protective action, becomes more alarming each year.

(h) Organized elephant control is imperative and the expulsion of the elephant herds from East Luangwa and certain plateau areas of Northern Rhodesia should be undertaken without delay.

(i) Past, disconcerted, anti-elephant operations have resulted—particularly in East Luangwa—in a very satisfactory decrease in elephant depredations, but without a corresponding appreciable decrease in elephant numbers.

(j) Organized elephant control should cost no more than it can earn.

*Legislation.*

(k) A revised ordinance on the lines of modern, East African game legislation should be introduced without delay.

(l) Revised, limited schedules are essential.

(m) Fees for certain game licences can be conveniently increased, others—particularly special licences for elephants—should be reduced.

(n) Considerable revenue is being lost by the relatively expensive elephant licence which remains unaltered in spite of the extremely low market value of ivory. A reduction in both the cost of the licence and the export duty on ivory would certainly result in an increase of revenue.

(o) A Game Department is a necessity and should be created as soon as funds are available. If it is appreciated that this country is rapidly dissipating one of its greatest assets—the game—which is not only of decided direct, but also incalculable indirect, benefit, perhaps in the near future .

an especial effort will be made to make available the necessary funds.

(p) In spite of the absence of a Game Department, the appointment of honorary game rangers would prove extremely beneficial.

(q) Penalties for infringements of the Game Regulations need enhancement. Imprisonment should be more often awarded as the principal penalty, and not relegated to an alternative to a fine.

(r) The abolition of a traveller's licence, the introduction of a fourteen day licence, and the consideration of a private land licence, are all recommended.

### *Education.*

(s) A considerable advance is advocated in the natural scientific and biological training of all pupils in Government schools, together with the acquisition of typical natural history collections.

### *Game Reserves and Especial Protective Measures.*

(t) Certain existing game reserves can be conveniently extended.

(u) Definite protection, by the creation of new, or the extension of existing reserves, should be afforded interesting and rare species such as the red and black lechwe, the tsessebe, Thornicroft's giraffe, and Cookson's wildebeest.

(u) 1. The black rhinoceros particularly is in urgent need of additional protection and should be included in strictly limited quantity on a special licence and a fee paid therefor.

(v) The native population should be removed from the game reserves as soon as possible.

(w) New game reserves should not be created in populous areas.

(x) A special game-warding messenger force should be recruited without delay for the supervision of the game reserves, and the vast game areas on the right bank of the River Luangwa in the Luangwa Valley.

(y) The alienation of the greater portion of the Luangwa Valley in the Mpika and Chinsali Districts as a game sanctuary *in perpetuity* is recommended.

### *National Parks.*

(z) The suitability of the Kafue Game Reserve, with certain proposed extensions, for conversion into a "National Park" should receive early consideration.

(aa) In the event of what is at present known as a "National Park" being established, it is recommended that it be styled "National Sanctuary"—a more fitting description of its functions.

### *Fisheries.*

(bb) A comprehensive fish survey of the territory by a qualified scientific investigator should be arranged as soon as conveniently possible.

### *Zoological Park.*

(cc) A Zoological Gardens mainly on the lines of an antelope park would prove a great attraction at the new capital—Lusaka.

### *Native Affairs.*

(dd) The whole-hearted co-operation of the Native Authorities is essential if the game generally is to enjoy efficient protection.

(ee) In "fly" areas, the reasonable perpetuation of the wild ungulates—the only source of meat supply—is imperative for the welfare of the indigenous population.

(ff) The possibility of combining the arms and native game licence, together with a marked increase of fees therefor, merits consideration.

(gg) A "cut and dried" limitation of the schedule of game permitted to be killed by the holder of a native game licence is strongly recommended.

(hh) The regulations concerning shooting by Europeans in native reserves can be conveniently amended to their mutual benefit.

*Tsetse Fly.*

(ii) Smudge huts should be erected without delay and maintained on all motor highways between "fly" and "fly"-free areas. The distribution of "fly" and the extension of "fly" areas through the agency of mechanical transport is taking place with alarming rapidity. It is the game which is usually made to suffer in the long run.

*Barotse.*

(jj) On account of the especial conditions prevailing it is recommended that all reference to Barotse is excluded from a revised Game Ordinance, and Game Regulations suitable to the circumstances of this province embodied in rules.

(kk) It is most strongly recommended that consideration be given to the possibility of altering the existing arrangement—which undoubtedly is a source of considerable embarrassment to neighbouring administrations—whereby nationals of Barotse have the right of hunting all species of game, free of licence in the districts adjoining their country. It is a prerogative which cannot last for ever, and in consequence the likelihood of an amicable adjustment should be investigated without delay. Efficient game conservation where such an arrangement exists is impossible.

*Buffalo.*

(ll) One of the most disquieting features of the game situation is the general abundance of buffaloes and the amazing progressive increase which is taking place. Short of placing the buffalo on the vermin list, which would be unwise for many reasons, no effort should be spared to effect a very appreciable reduction in buffalo numbers, and also in the future to put a very definite check on their unrestricted increase.

APPROXIMATE ESTIMATE OF UNGULATES IN NORTHERN RHODESIA  
(EXCLUDING BAROTSE).

Elephant . . . . .	12,000
Rhinoceros . . . . .	1,500
Hippopotamus . . . . .	3,000
Giraffe . . . . .	300
Buffalo . . . . .	60,000
Eland . . . . .	30,000
Sable Antelope . . . . .	10,000
Roan Antelope . . . . .	60,000
Lichtenstein's Hartebeest . . . . .	60,000
Greater Kudu . . . . .	10,000
Tsessebe . . . . .	6,000
Cookson's Wildebeest . . . . .	2,000
Blue Wildebeest . . . . .	30,000
Situtunga . . . . .	8,000
Black Lechwe . . . . .	150,000
Red Lechwe . . . . .	250,000
Puku . . . . .	20,000
Impala . . . . .	50,000
Zebra . . . . .	30,000
Common Waterbuck . . . . .	12,000
Defassa Waterbuck . . . . .	15,000
Reedbuck . . . . .	14,000
Klipspringer . . . . .	8,000
Oribi . . . . .	12,000
Bushbuck . . . . .	25,000
Common Duiker (at least) . . . . .	60,000
Sharpe's Steinbok . . . . .	25,000
Wart Hog . . . . .	No estimate.
Bush Pig . . . . .	No estimate.
Yellow-backed Duiker (about) . . . . .	1,500
Blue Duiker (all races) (about) . . . . .	3,000 ?
Red (Forest) Duiker . . . . .	No estimate.
Black-faced Impala . . . . .	500
Grand Total . . . . .	<u>968,000</u>

*Note.*—It will be realized that these figures can only be extremely approximate, although worked out carefully and systematically. All are guardedly low, and it is possible that some are as much as 50 per cent below the actual numbers.

I am confident that there are at present *at least one million* wild ungulates in Northern Rhodesia, nearly half of which are lechwe.

*Hippopotamus.*—The estimate does not include the Lake Tanganyika schools.

*Common Duiker and Sharpe's Steinbok.*—These estimates are probably very much on the low side.

*Carnivora.*—No estimate has been attempted of the larger carnivora, but lions must total several, and leopard many,

thousands. Cheetahs do not exceed a few thousands, if as many.

*Primates*.—No estimate has been attempted of baboons and monkeys. The former, in the Luangwa Valley, must total many thousands.

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## ASSAM

### FOREST ADMINISTRATION REPORT, 1934-5.

(Extracts from.)

#### THE PRESERVATION OF WILD LIFE AND ELEPHANT CONTROL.

##### *The Preservation of Wild Life.*

The outstanding event of the year was the assembling of an All-India Conference on this subject at New Delhi in January, 1935.

To accompany the writer as a co-representative for Assam the Local Government were fortunate enough to secure Mr. T. R. Phukan, Barrister-at-Law, who has been for very many years one of the most prominent public men in the Assam Valley.

A Resolution agreed to at the Conference was that provincial Forest Departments should deal with this question in a separate section of their Annual Reports, which accounts for the introduction for the first time of this additional chapter; the descriptions now given at some length of the Sanctuaries should not need repetition in subsequent Annual Reports. It had been recognised before the suggestion of holding the Delhi Conference had been mooted that efforts in Assam should be confined to the 6,600 square miles of Reserved Forest where there are already laws which, where not so at present, can be made adequate without difficulty and a staff which, if not adequate everywhere, can be augmented in important localities without very great cost.

It may seem shocking, especially to those who confound Game Preservation with Wild Life Protection, that it is