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CONSERVATION IN NATAL.The distribution
of ungulates
in Natal

Although it is not difficult to describe the present day distribution of each species of ungulate mammal in Natal, it is hard even to guess at the distribution of most of the same animals prior to the closing years of the 19th century. Early explorers, travellers and hunters often gave us good accounts and lists of the wild life met with on their wanderings in southern Africa, but it is noteworthy that virtually all of these people skirted the borders of Natal, doubtless because of the dissident nature of its Bantu population. As a result, prolonged research among bookshelves of "Africana" reveals little if anything in the way of information about the wild life found in Natal before permanent European settlement.

It is manifestly true also to say that long before white settlement can have had any material effect upon the populations of indigenous fauna, they must have been very extensively changed by the dense population of those great hunters, the Zulus. It is indubitably the case, in fact, that because of close settlement by these Bantu people, over a long period before the advent of the European, we shall never know the true details of mammal distribution in Natal prior to its wide alteration by human influences.

Another important and undoubtedly pertinent aspect of the problem is that settlement by man has for long inhibited any seasonal movements, particularly by the larger mammals, from the lowveld to the midlands or highveld. It is well known that the grasslands of the midlands and sourveld areas of Natal have a negligible carrying capacity for livestock during the long autumn and winter months; also that farmers there experience great hardship and expense in maintaining their animals in any sort of condition during that time. It is also well known that the farmers who do make and have made substantial incomes are those who own both a lowveld and a highveld farm, and are able to move their cattle from the former to the latter with the advent of spring, and *vice versa* in early autumn. Indubitably the same types of movements were carried out by many ungulates, although for many generations now they have been unable to follow any such age-old custom.

There are two species which at the present time are found only at high altitudes on the face of the Drakensberg massif, and it is very probable that they have always been thus localized. They are the Vaal Ribbok or Grey Rheebuck *Pelea capreolus*, and an as yet unidentified race of the Klipspringer *Oreotragus oreotragus*; the latter seldom occurring below 8,000 ft., and the former seldom below 4,500 ft. a.s.l.

Others among the ungulates found in the sourveld country no doubt in the past ranged or were distributed widely over the midlands and highlands, whereas now they are confined

to the fastnesses of the Drakensberg, to a few areas of particularly suitable habitat, or to the vicinity of extensive private properties where they have for a long time been rigorously preserved. These are the Tree Hyrax *Dendrohyrax arboreus*, Eland *Taurotragus oryx*, the Mountain Reedbuck *Redunca fulvorufula* and the Oribi *Ourebia ourebi*.

In so far as the largest ungulates are concerned, and those incompatible with organized agriculture, or previously much persecuted, it can be said that at the present time they are entirely confined to the larger, proclaimed game reserves in Zululand or to their near vicinity. In this group come the African Elephant *Loxodonta africana*, Black Rhinoceros *Diceros bicornis*, Square-lipped Rhinoceros *Ceratotherium simum*, Burchell's Zebra *Equus burchelli*, Brindled Gnu [or Blue Wildebeest] *Connochaetes taurinus* and, apparently, the Warthog *Phacochoerus aethiopicus*.

The smaller ungulates, which are either difficult to hunt, not prized for their flesh or skin, or to all intents and purposes harmless to agricultural interests, do survive in adequate numbers for some better light to be thrown upon their general distribution within the Province. Quite naturally a few of these are ubiquitous in suitable vegetation and terrain; such as the Rock Hyrax *Procavia capensis*, Grey Duiker *Sylvicapra grimmia*, Reedbuck *Redunca arundinum* and Bushbuck *Tragelaphus scriptus*. It is perhaps possible here also to include the Bushpig *Potamochoerus porcus*, although its range has been much reduced and now may be restricted to the lowest levels.

Generally speaking, however, the distribution of the others seems to adhere closely, in the same way as does that of many bird species, to the acacia thornveld. The result is an extensive distribution at the lowest altitudes, from sea level to about 1,500 ft., with some considerable westward extensions of range, reaching even to slightly higher altitudes up into the deeper valleys of such river systems as the Tugela and Umfolozi. As in the birds it is this lowest altitudinal zone which contains the largest number of species. Those ungulates whose main populations can be included here are the Hippopotamus *Hippopotamus amphibius*, Red Duiker *Cephalolophus natalensis*, Steenbok *Raphicerus campestris*, Impala *Aepyceros melampus*, Kudu *Tragelaphus strepsiceros*, and African Buffalo *Syncerus caffer*.

Also to be included among these lowveld species it is interesting to note at least three species, the Suni *Nesotragus moschatus*, Waterbuck *Kobus ellipsiprymnus* and Inyala *Tragelaphus angasi*, which illustrate that same intrusion of tropical forms as is found among the avifauna, extending from the Moçambique border to the St. Lucia area, or to about the mouth of the Umfolozi river system. In earlier times the intrusion perhaps extended even a little farther south along the littoral, perhaps to the area of the Tugela River mouth.

There is one other species not yet mentioned, which it is perhaps not entirely accurate to list among the lowveld forms, and this is the Blue Duiker *Cephalophus monticola*. Although commonest at the lowest levels, it is really an animal of evergreen indigenous cover, whether this be coastal jungle or rain forest. Accordingly it still extends into most of those relict patches of rain forest which occur widely in the midlands, and there it may be found up to about 4,000 feet a.s.l.

During this brief overall survey of the various habitats, twenty-seven of the thirty-one ungulates have been mentioned. The four which remain fall into entirely different categories.

One of them is the Grysbok *Raphicerus melanotis*, and this is best listed as an at present unidentified probability. There is certainly a small red antelope in forest patches in deep valleys of the high Drakensberg, and the remains of a carcass seen showed some traces of white hairs. It seems likely that either an undescribed, high altitude race of *R. melanotis* is involved, or possibly of *R. sharpei*.

The remaining three mammals in Natal's ungulate list are best described merely as recent reintroductions. The indigenous race of the Red Hartebeest *Alcelaphus buselaphus* seems now to be extinct in Natal. Little more need be said about it here because the whole subject has

been adequately covered in an excellent paper on the animal's disappearance, which appeared in the May 1961 issue (Vol. 2, No. 2) of *Natal Wild Life*. It is included in this present review of the distribution of ungulates in Natal, merely in order to record that 1960 saw the Natal Parks, Game and Fish Preservation Board's first attempt to reintroduce the species. During that year two juvenile animals were obtained from De Beers Consolidated Mines, at Kimberley, and placed at the Giants Castle Game Reserve where they are now doing well. It is hoped that further animals may later be added to this small beginning.

This leaves only the Giraffe *Giraffa camelopardalis* and the White-tailed Gnu [or Black Wildebeest] *Connochaetes gnou*. It has not been possible conclusively to determine whether giraffes did in fact once occur in Zululand, but the habitat was so obviously suitable for them that giraffes were introduced in 1947 and 1950 into the Hluhluwe Game Reserve, where a small party now breeds and thrives. The White-tailed Gnu is another species concerning whose earlier occurrence in the highveld areas of Natal little if anything can be gleaned from old literature. That the animal did occur here seems to be clear enough, and it is perhaps pertinent that two of them grace the Province's coat of arms.

In any event two large reserves in the Drakensberg controlled by the Natal Parks, Game and Fish Preservation Board—the Giants Castle Game Reserve and the Royal Natal National Park—contain ample grass cover to carry a population of gnus without any detrimental effects upon the essentially browsing population of eland. The Board accordingly decided upon a reintroduction of the species and it was in 1956 that the first few animals were obtained. More were added during 1957 and again in 1958, with the result that the new population now numbers thirty-four individuals which can happily be said to be thriving in every sense of the word.

A slightly more detailed summary of the distribution of each individual species listed in systematic order, is as follows:

1. African Elephant *Loxodonta africana*.

Limited to a small herd on the eastern boundary of the Ndumu Game Reserve, adjacent to the Moçambique border.

2. Rock Hyrax *Procavia capensis*

General throughout the Province in suitably rocky habitat.

3. Tree Hyrax *Dendrohyrax arboreus*

Recorded in the large Karkloof Forest of the Natal midlands and doubtless occurs in other evergreen rain forests of the Province; but no records can be traced and little seems to be known of its incidence or distribution.

4. Black Rhinoceros *Diceros bicornis*

Confined to the game reserves of Mkuzi, Hluhluwe and Umfolozi; also found in the State-owned lands between the two latter, known as 'The Corridor'.

5. Square-lipped Rhinoceros *Ceratotherium simum*

Confined to the Hluhluwe and Umfolozi Game Reserves in north-eastern Zululand. (A wide knowledge of the different field habits and habitats of the two rhinos, as well as of their utterly dissimilar characteristics and reactions, makes it impossible for the writer to agree with those who treat them as congeneric).

6. Burchell's Zebra *Equus burchelli*

Confined to the game reserves of Mkuzi, Hluhluwe and Umfolozi and the State-owned land between the two latter. (According to Ellerman, Morrison-Scott and Hayman the Natal animal is called Chapman's Zebra *E. b. antiquorum*. The writer, however, prefers to retain the name Burchell's for the trivial term, since he is by no means happy about Zululand and Transvaal examples being considered one and the same. The two are always easy to recognize in the field because of their distinctive leg striping).

7. Bushpig *Potamochoerus porcus*

Widespread and general throughout the littoral, but apparently not found much above 1,000 to 1,500 ft. a.s.l. Occurs in some evergreen forests, but nowadays mainly confined to sugar cane lands, wherein it is increasingly common.

8. Warthog *Phacochoerus aethiopicus*

Apparently now restricted to the game reserves of Mkuzi, Hluhluwe and Umfolozi, and the adjacent State-owned lands.

9. Hippopotamus *Hippopotamus amphibius*

Confined to a few waterways of the north-eastern Zululand littoral, from the Moçambique border south to about Richards Bay. More detailed localities are—the Ndumu Game Reserve and adjacent Pongolo River, the Pongolo lakes, the Kosi Bay lakes, Lake Sibayi, the St. Lucia lake system and its tributaries, the lower Umfolozi River and Lakes Eteza and Umsingazi.

10. Giraffe *Giraffa camelopardalis*.

Only in the Hluhluwe Game Reserve, where introduced.

11. Red Duiker *Cephalophus natalensis*

In thick coastal scrub and evergreen forest patches of north-eastern Zululand, also in some gullies of the Lebombo hills; but not extending much above 1,000 ft. a.s.l. Although widespread it is nowhere common. The type locality is near Durban, and doubtless it was formerly widespread in the coastal bushes of southern Natal. At the present time, however, it would seem to have disappeared from the area, except for a few individuals in a well preserved forest in the magisterial division of Inanda.

12. Blue Duiker *Cephalophus monticola*

In suitable evergreen thickets and forest throughout Natal as far north as about the Umfolozi River system. Mainly in the coastal areas, but also in suitable indigenous rain forest of the midlands up to about 4,000 ft. a.s.l.

13. Grey Duiker *Sylvicapra grimmia*

Quite ubiquitous and general at altitudes up to about 6,000 ft. in the foothills of the Drakensberg. Extremely common in the game and nature reserves. Seems to be the only antelope which survives even in some Native reserves.

14. Steenbok *Raphicerus campestris*

Essentially an animal of the drier and more open types of lowveld. Occurs commonly in the Umfolozi Game Reserve and probably now no farther south. It is also in the Mkuzi Game Reserve and less commonly, although widespread, from the Hluhluwe Game Reserve northwards into the Ngotshe district and throughout north-eastern Zululand. (It is not known whether the subspecies involved is *capricornensis* or *zuluensis*. The writer has also recorded no Steenbok from the highveld, and not only doubts its occurrence there but also knows nothing of the so-called race *natalensis*, described as from "Drakensberg, Natal.")

15. Grysbok *Raphicerus melanotis*

Whether this occurs at all in Natal is open to doubt. No specimen has definitely been recorded in the Province, certainly not for a very long time, and even if the skulls in the British Museum, reputed to be of this species and from Zululand, do emanate thence it has not been seen in any of the Zululand game reserves. A few examples of a small, unidentified antelope do still exist in high forest patches on the slopes of the Quathlamba Drakensberg, and it is possible that these may represent some race of the Grysbok, but none has yet been obtained for identification.

16. Oribi *Ourebia ourebi*

Nowhere particularly common, except perhaps in the Giants Castle Game Reserve and on one or two highveld farms where wild life is strictly preserved. Nevertheless still occurs throughout the Province in suitable areas of open grassveld, particularly in the Natal midlands from about 7,000 ft. down to about 1,500 ft. a.s.l. The distribution or incidence is really now governed by the degree of protection afforded. Without doubt the species was formerly much more widespread.

17. Suni *Nesotragus moschatus*

In suitably dense coastal bush east of the Lebombo range and from the Moçambique border south to about St. Lucia. Commonly seen in the game reserves of Mkuzi and Ndumu.

18. Klipspringer *Oreotragus oreotragus*

Now rare and apparently found only in the Umfolozi Game Reserve and at one or two points farther north in the Lebombo range. Also found sparingly above 8,000 ft. and in suitably guarded areas, on the steep rocky faces of the Quathlamba Drakensberg, from Giants Castle to Royal Natal National Park.

19. Grey Rhebuck *Pelea capreolus*

Only found on steep and open, grass covered rocky slopes of the high Drakensberg, from about 8,000 ft. to 4,500 ft. a.s.l.; seldom now found at any lower altitude.

20. Reedbuck *Redunca arundinum*

Ubiquitous throughout the Province and at all levels below about 7,000 ft. Widely distributed but nowhere common.

21. Mountain Reedbuck *Redunca fulvorufula*

Appears to be found sparingly on open, rocky hillsides throughout the Province; although because of the restricted nature of its habitat often heavily poached and disappearing from

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some areas, particularly at the lower levels. Although nowhere very common, except in the Drakensberg wild life sanctuaries, it is found from about 8,000 ft. where it occurs alongside *Pelea capreolus*, right down to hills in Zululand of no more than 1,500 ft. altitude.

22. Waterbuck *Kobus ellipsiprymnus*

Apparently now confined to the game reserves of Hluhluwe and Umfolozi.

23. Impala *Aepyceros melampus*

Quite widely distributed in the Zululand acacia thornveld north of the Umfolozi River, particularly in the game reserves of Umfolozi and Hluhluwe and in adjacent hills up into the Ubombo and Ngotshe districts. Reintroduced into the St. Lucia and Ndumu areas, and more recently among many privately owned thornveld farms virtually throughout the Province.

24. Red Hartebeest *Alcelaphus buselaphus*

Only in the Giants Castle Game Reserve where introduced.

25. White-tailed Gnu *Connochaetes gnou*

Long disappeared from Natal in a feral state. Reintroduced into the Giants Castle Game Reserve in 1956 and 1957 and into the Royal Natal National Park in 1958.

26. Brindled Gnu *Connochaetes taurinus*

Now restricted to the game reserves of Umfolozi, Hluhluwe and Mkuzi and some closely adjacent State-owned lands.

27. Bushbuck *Tragelaphus scriptus*

Ubiquitous from about 6,000 ft. down to sea level in all suitably dense evergreen cover, whether this be coastal jungle, riverain scrub or mountain rain forest.

28. Inyala *Tragelaphus angasi*

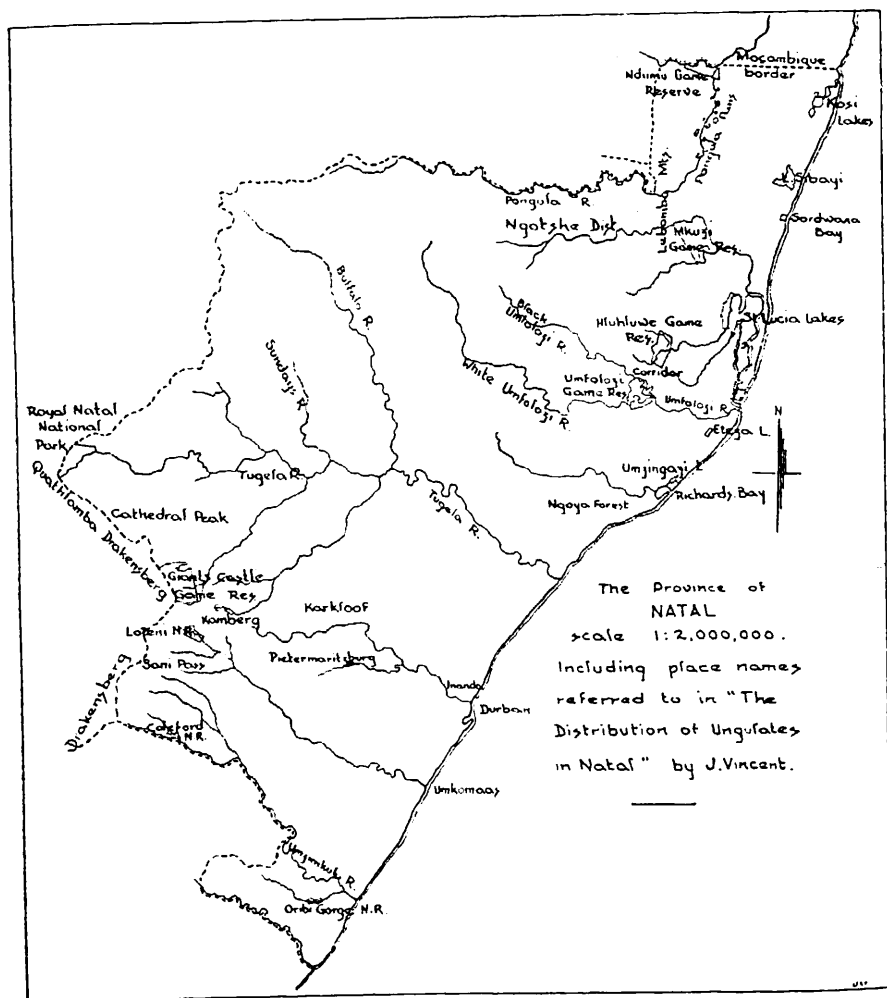
Now limited to the proclaimed reserves of Mkuzi, Hluhluwe, Umfolozi, Ndumu and St. Lucia. Until this century no doubt widely distributed in suitably dense cover to the east of the Lebombo range south to about the Umfolozi River. Ellerman, Morrison-Scott and Hayman say—"introduced into the Hluhluwe Game Reserve", quoting Roberts, but this was a reintroduction from the Mkuzi Game Reserve, into another sanctuary where the species had been common fifty years earlier.

29. Kudu *Tragelaphus strepsiceros*

Common in the game reserves of Mkuzi, Hluhluwe and Umfolozi; also found on some private farms in the divisions of Ubombo and Ngotshe.

30. Eland *Taurotragus oryx*

Only in the Drakensberg and there mainly in the Giants Castle Game Reserve, whence it has extended outwards to a distribution which can be described as—along the eastern face of the Drakensberg from about Sani Pass to Cathedral Peak, and between the 8,000 ft. and 5,500 ft. levels.

31. African Buffalo *Syncerus caffer*

The game reserves of Hluhluwe and Umfolozi and the immediately adjacent State-owned lands. It is likely also that a few animals remain in the vicinity of the Ngoyia Forest, near Eshowe.

DISCUSSION

Mr. Grindley: Will there be any attempt to correlate the maps presented for the different provinces?

Prof. Balinsky: Perhaps by the authors themselves, but it is not considered an editorial task.

Dr. Talbot: Apropos of Mr. Van Ee's earlier remarks on exotic ungulates, the Cape Province has a Department of Nature Conservation but several kinds of deer have been introduced.

Mr. Bateman: I have investigated the origins of the deer in this province. It appears that the earliest introduction occurred in the 1870's when a Mr. Ohlsson brought in Red Deer from Scotland. Fallow Deer were imported in the 1890's and spread mainly from Groote Schuur. These introductions thus took place before any Nature Conservation Department existed. Fallow Deer have always been very popular, largely for their aesthetic appeal, but also because they have proved very hardy and adaptable, able to withstand conditions which have wiped out even indigenous and domestic animals. For instance, during a spell of extreme cold in the Cradock area, Springbok, Blesbok and sheep succumbed while Fallow Deer survived. The danger from the conservation point of view is thus that these introduced forms will spread and multiply at the expense of the indigenous fauna.

Dr. Stuckenberg: On a visit to Madagascar, Fallow Deer were the first animals I saw in the tropical rain forest!

Mr. van Ee: I understand that certain farmers have obtained permits at the present time to introduce another exotic into the Cape, namely Barbary Sheep. Does Dr. Bigalke know whether this is correct?

Dr. Bigalke: I do not know, but if it is so, it is a sad reflection on the responsible authorities.