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### PROPOSALS FOR A GAME RESERVE IN THE WESTERN KAKOVELD\*

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#### ABSTRACT

The Odendaal Commission Report for the future development of South West Africa was published in 1964, and included recommendations for the partition of the Kaokoveld/Etosha Game Reserve complex. The subsequent reaction from conservationists in South, and South West Africa has unfortunately revealed considerable contradiction and confusion as to the actual issues involved.

This paper – the outcome of 2½ years personal experience in this little known region – has as its object the presentation of essential facts on which any informed discussion regarding desirable amendments to the Odendaal Plan should be based. The writer concludes by reviewing the principles of optimum land utilization in relation to the western Kaokoveld and gives his personal recommendations for future development planning.

#### HISTORICAL BACKGROUND

ALTHOUGH Portuguese mariners had reached South West Africa by 1485, the inhospitable coastline prevented exploration of the interior for nearly three hundred years.

About the middle of the eighteenth century the first Cape settlers crossed the Orange River, and during the following years, expeditions from the south traversed the Great

Namaqua Plateau and entered Damaraland. By 1850 small trade and mission stations had been established in many parts of southern and central South West Africa.

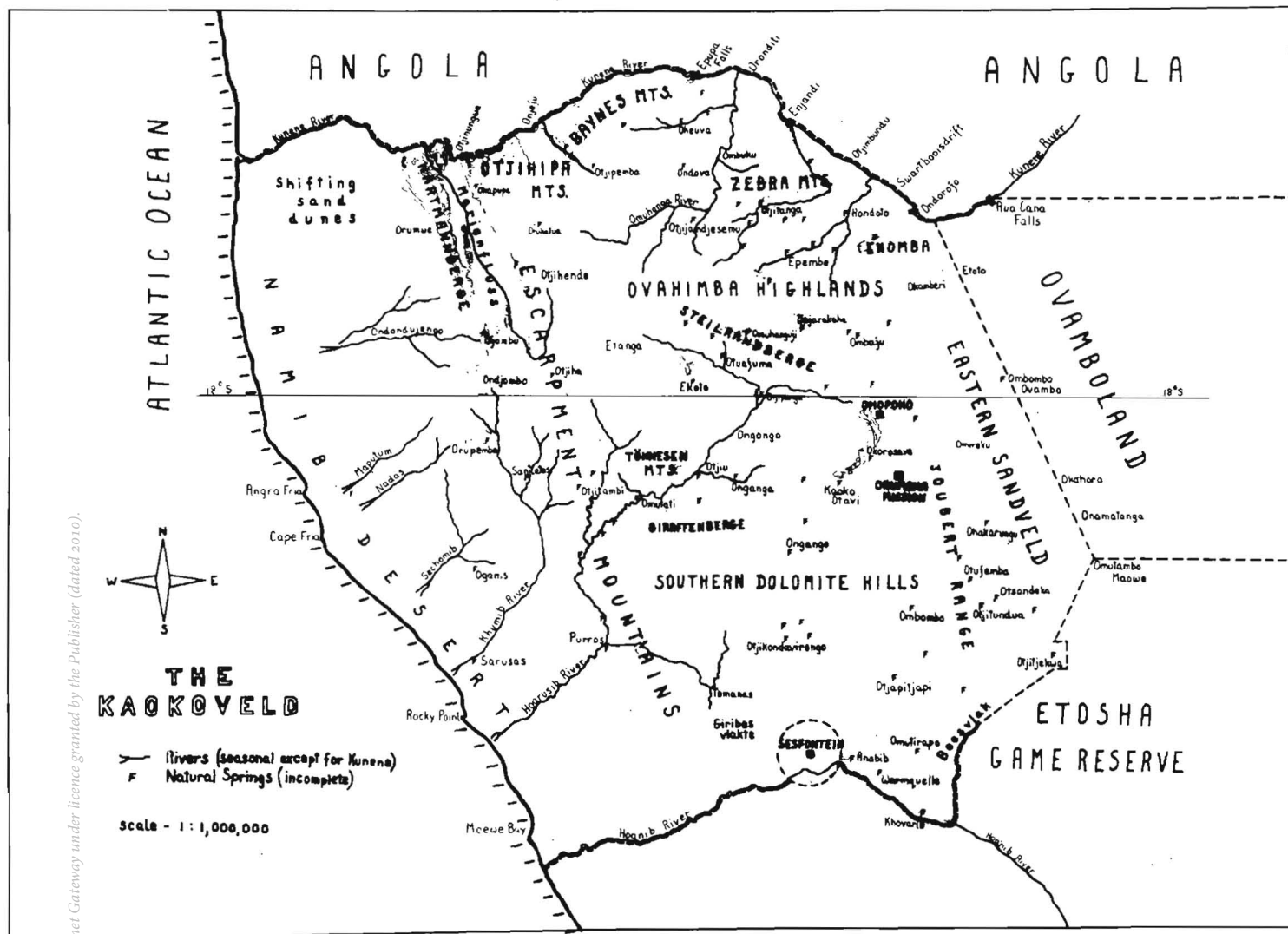
The first overland attempt to penetrate the Kaokoveld interior was made by Charles John Andersson in 1858. After trekking across the broad plains of Damaraland, Andersson entered a region of arid mountains so rugged that it barred his further progress. It was left to Hendrik Smuts, a hunter from the Cape, to be the first white man to reach Kunene River from the south, followed a few years later by the explorers Frederick Green and Axel Eriksson.

In 1885 Germany annexed South West Africa, but the Kaokoveld was later sold to the Kaokoveld Land and Mining Company of London for £45 000. Dr George Hartmann was commissioned by this company to explore their newly acquired territory for minerals and guano. In 1895 Hartmann set off on the first of a number of expeditions in which he was to traverse the region from east to west and also travel along the whole coast from the Kunene mouth to Swakopmund. Although he discovered no deposits of value, Hartmann produced the first map of the Kaokoveld that was based on actual observation.

After the turn of the century, expeditions were led by Dr Kuntz, a geologist, Maudslay

\* Presented to Section G of the 69th Annual S<sub>2</sub>A<sub>3</sub> Congress, Durban, July 1971.

A detailed discussion on the ecology of the whole Kaokoveld is given in *The Kaokoveld: An Ecological Base for Future Development Planning*, of which this paper is an abridged version.



Baynes, an Englishman who followed the Kunene river from Eriksson's Drift to the coastal plain, and Dr Vedder, who studied the indigenous peoples.

In 1915, South West Africa was surrendered to the invading Union Forces, and by the Treaty of Versailles was declared a C Mandate, entrusted to South Africa.

To obtain information for the new administration, further Kaokoveld expeditions were organised by Manning, Deney's Reitz and Guy Shortridge (the author of 'Mammals of South West Africa'). However, the remoteness and inaccessibility of the Territory left considerable areas still completely unexplored.

In 1922, the Kaokoveld was proclaimed a reserve for chiefs Oorlog, Muhona Katiti and Kusupi and their respective tribes. The reserve was theoretically administered jointly by officials in Outjo and Ovamboland, but in actual fact they seldom visited the area and the natives were largely left to themselves. Six years later the Kaokoveld was also declared a game conservation area, to be known with the Etosha Game Reserve, as Game Reserve No. 2 — covering a total area of approximately 34 000 square miles.

In 1939 the first Native Commissioner for the Kaokoveld was stationed at Ohopoho, and in 1947 the Territory was officially proclaimed as a separate native reserve.

In 1962 the Odendaal Commission was appointed to enquire into 'further promoting the material and moral welfare, and social progress of the inhabitants of South West Africa, more particularly its non-white inhabitants'.

The recommendations of this Commission were submitted in 1964, and included the deproclamation of the Kaokoveld game conservation area, and the ceding of approximately 6 000 square miles of the Etosha Game Reserve to the Kaokoveld, Ovambo and Damara homelands. A twenty mile wide strip of Namib desert along the coast would remain as a game reserve. In effect, Game Reserve No. 2, which in 1962 covered 34 000 square miles would be reduced to two separate reserves — the Etosha Game

Park and the Skeleton Coast — with a combined area of about 14 000 square miles of which more than half is either barren desert or salt pan.

## ECOLOGICAL SUMMARY

### *Topography and Vegetation*

The Kaokoveld Native Reserve, as it still existed in 1968, was approximately 22 000 square miles in extent. The borders were — in the north, Angola; in the east, Ovamboland; in the south, the Etosha Game Reserve; and in the west, the Atlantic ocean.

The most striking topographic feature of the region are the mountains, which rise to over 6 000 feet in the northern Baynes and Otjihipa ranges. Between forty and sixty miles from the coast, a rugged escarpment divides the relatively high interior plateau from the lower lying desert and semi-desert plains. In places, this escarpment rises steeply for more than 4 000 feet.

The only perennial flowing river in the Territory is the Kunene, which rises on the well watered highlands of central Angola. After entering the Kaokoveld, twenty miles west of the Rua Cana Falls, the Kunene cuts a deep gorge through the Zebra, Baynes and Otjihipa mountains, before crossing the semi-desert region and flowing into the sea on the desolate Skeleton Coast.

The interior plateau is drained by a number of large seasonal rivers, either running north into the Kunene, or westward to the Atlantic. Although these rivers only run on the surface immediately after rain, water flows throughout the year a few feet underground, and can be obtained either where rocky obstructions have forced it to the surface, or by digging in the sandy river beds. Many natural fountains are also found in the limestone and dolomite regions of the south and east.

For the most part, the Kaokoveld highlands are well bushed with fairly tall mopane woodlands in the north. The Terminalia, Combretum, Commiphora and Acacia families are also well represented. Although predominantly of annual species (*Aristida effusa*, *Schmidtia*

*kalahariensis*), the grass cover is generally good, but subject to overgrazing in the vicinity of watering points.

Below the escarpment, the plains are treeless or lightly wooded, with tall mopane (*Colophospermum mopane*), leadwood (*Combretum imberbe*), camel thorn (*Acacia giraffae*) and ana trees (*Acacia albida*) lining the river courses. The semi-desert region is well grassed with perennial species – *Stipagrostis uniplumis*, *S. hochstettariana* and *Kaokochloa nigrinostis*. Westward the grass is replaced by Euphorbia scrub, although after occasional showers the desert annual, *Stipagrostis hirtigluma*, sparsely covers large tracts of the Namib. Except in the lower reaches of the river beds, the Skeleton coast is devoid of vegetation.

### Indigenous People

The Kaokoveld population, which in 1970 numbered approximately 13 000, is made up mainly of three closely related tribes – the Herero, Tjimba-Herero and Himba – who are all of the same stock, and speak the same language.

The Hereros are mostly descendants of refugees from the Herero revolt of 1904, who moved into the Kaokoveld, via Angola, just after the First World War. These people, less than two thousand in number, have settled mainly in the central highlands around Okorosave, Kaoko Otavi and Oruandje. A smaller group moved in from the Kamanjab area in 1925 and now reside in the south eastern region with their headquarters at Otsondeka and Omombo. During their previous residence in the south, the Herero people adopted many features of European culture, including the contemporary dress, and today, although animal husbandry is still their main occupation, they are relatively sophisticated and consequently have considerable political influence in the Territory.

In the Herero/Nama wars of the last century, most of the Kaokoveld natives (Herero) lost their cattle and became known as the OvaTjimba.\*

\* 'Tjimba' is derived from the Herero word for the aardvark (ondjimba-ndjimba) in reference to their having to dig for food. 'Ova-' is merely a prefix to denote 'people'.

For many years these people were extremely poor, and lived by hunting and collecting 'veldkos', but the majority have since acquired cattle, and resent this name, which they now regard as inappropriate. In the southern Kaokoveld, the OvaTjimba or Tjimba-Herero, who possibly number four thousand, have imitated the Herero in most respects, including dress.

To escape from the raiding Nama, a number of Kaoko-velders fled across the Kunene and requested living space from the people of southern Angola who gave them the name OvaHimba.\*\* After the turn of the century, these Himba, under Oorlog Tom, accumulated large herds of cattle by subduing the neighbouring tribes. Many returned to the Kaokoveld with Oorlog in 1920, where they settled in the northern highlands and absorbed the local OvaTjimba. The Himba, approximately 6 000, now resident in the Territory, have had very little contact with white civilization, and their mode of dress and nomadic pastoral life are still governed by ancient traditions. Although small plots of mealies are cultivated during the rains, the Himba diet is derived mainly from their considerable herds of cattle, sheep and goats.

In the remote Baynes and Otjihipa mountains live a few stone using, hunter-gathering people, also known as OvaTjimba (Tjimba-Tjimba). There is evidence to suggest that these people are not of Herero stock, although they have been, and are still being assimilated into the neighbouring Himba clans.

It appears likely that in the distant past, both the Bushman and the more negroid Damara were widespread in the Kaokoveld, but within the last twenty years, the 'Strandloper' Bushman has passed from the scene, and only a few Damara remain, in the dusty Hoanib river valley between Warmquell and Sesfontein.

In the second half of the nineteenth century, marauding bands of Topnaar and Swartbooi Nama came to Sesfontein where they settled after driving out the Herero and subjugating the Damara. In the following years the

\*\* The people who 'beg' or 'request'.

once considerable herds of cattle, belonging to these Nama, have been depleted by disease and drought and today they rely largely on crops irrigated from fountains at Sesfontein and Anabib.

### *Wild Life*

The Kaokoveld has been a proclaimed game conservation area since 1928, although the native inhabitants do possess firearms and are not prohibited from shooting any species. The stock owning Herero and Himba people are, however, little interested in game as a source of food, and the wild life of the region is today still varied and numerous.

Elephant are found throughout the Territory, excepting on the desert coast, being especially plentiful along the Ovamboland border, on the Ovahimba highlands and in the mountains and river valleys of the west. The black rhinoceros appears to be decreasing on the plateau, but is still relatively common in the escarpment mountains and on the semi-desert plains.

Amongst the predators leopard are widespread, and lion are still found in a few isolated areas, mainly in the west. Lion also periodically enter the southern Kaokoveld from the adjoining Etosha Game Reserve. Cheetah and wild dog are both occasionally encountered, and both the spotted and brown hyena are still common. The larger predators all prey on the native livestock to some extent, but nowhere were stock losses found to be heavy.

Giraffe, Burchell's and Hartmann zebra, kudu, gemsbok, impala, springbok, steenbok, duiker, klipspringer and dikdik are all more or less plentiful and hartebeeste are occasionally seen along the eastern border.

During two and a half year's residence in the Kaokoveld, no signs were found of any large scale annual migration of game to and from the Etosha saline area. The evidence collected suggests a rather local seasonal cycle, with the water dependent animals, such as elephant, zebra and kudu, concentrating in the vicinity of permanent waterholes during the dry months. In the rainy season, these animals disperse to exploit grazing in neighbouring areas

where water has become available in the form of rain-filled pans and rock pools. These local movements do cross political boundaries where these have been drawn through single ecological units.

In years when the desert receives rain, large herds of springbok, gemsbok and Hartmann zebra concentrate on the new grass, but it appears likely that these animals come from no further afield than the escarpment mountains where they are plentiful, although usually widely dispersed. It is possible that springbok may also come from the interior plateau.

### DEVELOPMENT AND ITS PROBABLE EFFECTS

Until 1950 the way of life in the Kaokoveld was primitive and little affected by the twentieth century — less than a generation ago white civilization was represented by a single European official stationed at Ohopoho. In the intervening years, Ohopoho has grown into a small but firmly established town; the first mission, hospital, school and post office have been built, agricultural and veterinary services improved, and lately, large scale exploration has been commenced by two Rand based mining companies.

The future promises accelerating development, and plans have already been drawn up for new towns, hospitals and dams. A hydro-electric power scheme at Rua Cana is nearing completion and construction has begun on a modern harbour on the Skeleton Coast. On the contiguous Kaokoveld and Ovamboland southern border, an extensive quarantine camp is being built that will enable livestock, previously prohibited from crossing the 'red line', to be exported to markets in the south.

These developments will have far-reaching effects on the Kaokoveld scene. The new facilities for selling and exporting livestock, by bringing comparative affluence to the cattle rich Herero and Himba people, must inevitably initiate a swing away from the tribal customs and traditions. The impact of education and a higher standard of living, will create new horizons for the younger Kaokovelders, who can no longer be expected to accept any stock

or crop losses caused by predators and other wild animals. The introduction of modern farming methods, which must eventually involve the erection of fences, will make the presence of elephant intolerable. With the emergence of a cattle-less and therefore protein hungry working class element in the indigenous population, the survival of the larger wild ungulates will also be uncertain. However, the most immediate threat to the wild life of the Kaokoveld will be the influx of European officials and workers and the consequent rise in poaching.

Based on the above predictions the gradual disappearance of most of the larger game animals in the Kaokoveld appears inevitable under the proposals recommended by the Odendaal Commission. But is the destruction of wild life the unavoidable price of progress?

## DISCUSSIONS AND CONCLUSIONS

### *Optimum Land Use*

In Southern Africa today, the vital need for rational land use planning cannot be overstressed. The regional deterioration of vast tracts of the sub-continent — because of incorrect or short-sighted agricultural practices — can no longer be tolerated, and in future ecological considerations must receive the highest priority in all rural development planning.

The Kaokoveld can be divided naturally along a chain of rugged mountains into a relatively high interior plateau, and a series of lower lying river valleys and plains. The average rainfall on the plateau ranges from about 100 mm above the escarpment, to 400 mm in the north east of the Territory. The apparent absence of many tropical stock diseases, probably attributable to the semi-arid climate, counters the generally low carrying capacity of the region, making the highlands as a whole very suitable for livestock ranging.

Traditionally the Kaokoveld natives have not resided west of the escarpment, although it appears that in periodic dry years, Himba from the western plateau regions migrated down the river valleys onto the semi-desert plains. Here

the tall perennial grasslands were utilized for a few months until rain had fallen on the highlands. Recently, however, the rapidly expanding herds of the plateau Himba have caused an overflow onto the semi-desert, where about twenty families have now taken up semi-permanent residence between Orupembe and the Hartmannberge. In the last few years continuous grazing and trampling, particularly in the vicinity of watering points such as Orupembe, has led to a severe degeneration of the grass cover, and exposure of the soil to wind erosion.

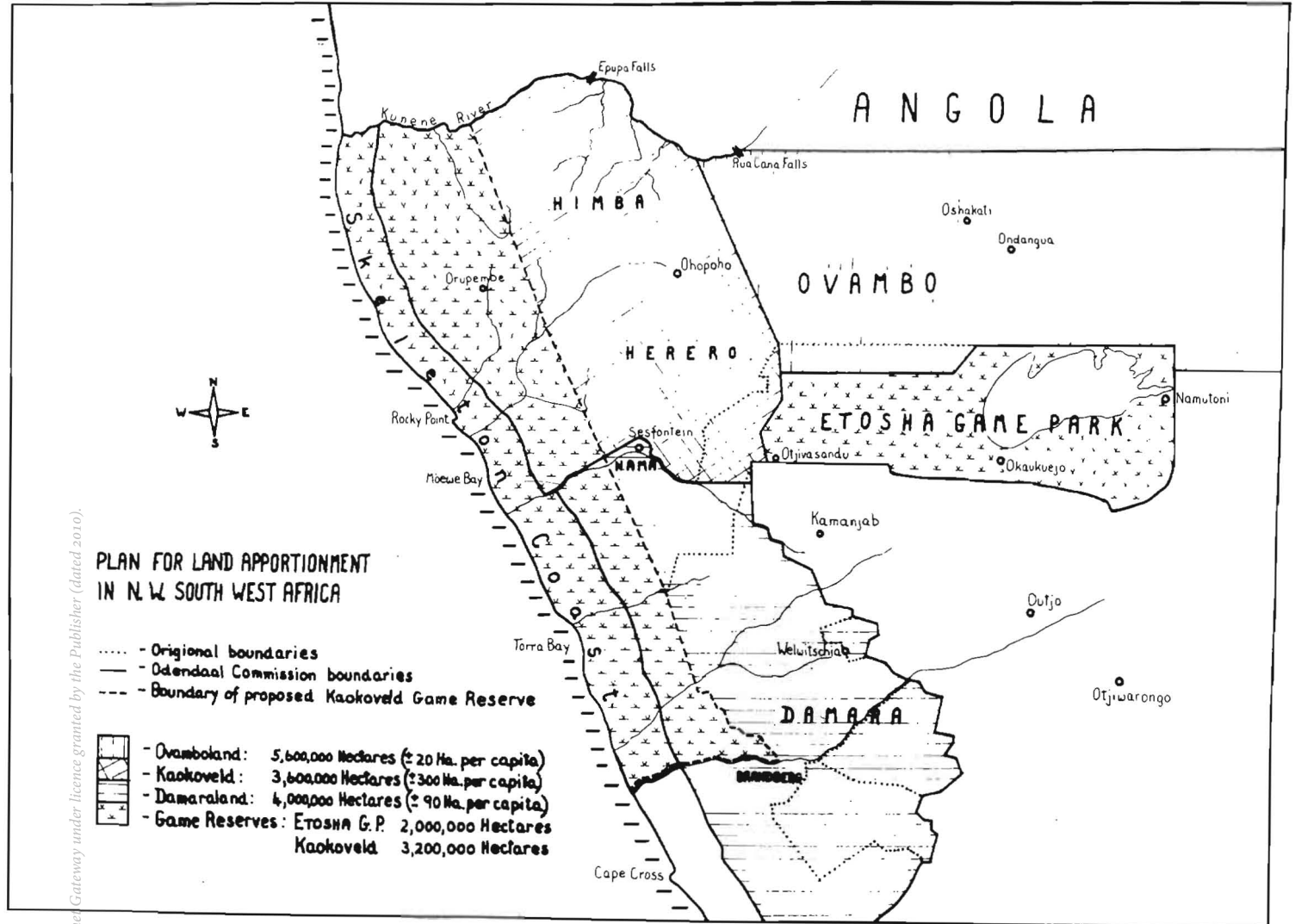
The present position at Sesfontein should be taken as a warning. Situated in the deep Hoanib river valley, Sesfontein, although east of the escarpment, receives an irregular rainfall averaging less than 120 mm per annum. Over the years sustained heavy grazing on the surrounding plain has reduced the whole valley into an enormous dustbowl. During the 1970 drought, the already impoverished people here would undoubtedly have suffered considerable stock losses had they not been granted emergency grazing in the neighbouring Etosha Game Reserve.

Dr Rautenbach has recently stated that the purpose of planning is the optimum use of resources. What does the optimum use of resources consist of in the western Kaokoveld? Surely not conventional animal husbandry which, unless preceded by extensive ecological research, can only be regarded as regional suicide in this delicately balanced semi-desert environment.

It is now generally recognised that in a semi-desert environment, wild ungulates, because of the differentiation in their diets, the ability to forage further from watering points and their consequent better dispersal, are able to make more effective use of the available food and water resources, with minimum damage to the habitat.

### *Scientific Importance of the Kaokoveld*

Apart from numerous endemic species of plant and lesser animal life, some unique to the western Kaokoveld, the broad plains of the semi-desert support large numbers of springbok,



gemsbok and zebra, and the river courses that traverse the region are the stronghold of elephant, rhinoceros, giraffe, lion and cheetah. The ability of many of these large mammals to exist in this extremely arid environment is of great scientific interest, and our loss will be inestimable should they pass from the scene before a proper study can be made of their ecology.

### *Wilderness and Modern Man*

Throughout the western world the increasing pressures of urban living are creating an awareness of the essential value of the wilderness aspect to the human environment. In 1964 the National Wilderness Preservation Act was passed by the American Congress, whereby over nine million acres of wild land was protected from any development, and preserved in its natural state for future generations. Conservationists in the United States hope to have a further forty million acres approved for inclusion in a National Wilderness System by 1975.

South Africa cannot afford to disregard the growing significance of wild land, both as a cultural heritage and as a recreational necessity. Already many of our larger game reserves are showing signs of over-crowding, and the quality of experience derived by visitors to these areas is decreasing as traffic congestion increases. In future, wild land will undoubtedly be a national resource of major importance. We need but remember that seventeen years after the establishment of the Yellowstone National Park in America, President Paul Kruger, against much opposition, proclaimed the Sabie Game Reserve in the Transvaal Lowveld. The situation today has confirmed President Kruger's wisdom and foresight.

### *Conclusions*

- (i) Although considerable numbers of elephant, zebra, kudu, impala and springbok still survive on the Kaokoveld plateau, a realistic assessment of the position on these fertile highlands leaves no doubt that the requirements of the human population should take precedence in any conflict of interests.

- (ii) The large scale introduction of livestock (or any other agricultural practices) into the semi-desert region, will in the long term lead to a deterioration of the habitat, and an eventual expansion of the Namib desert.
- (iii) The stark mountains and tawny plains of the western Kaokoveld offer spectacular panoramas, and with the added lure of big game, the region can rival the already world renowned tourist Meccas in East Africa.
- (iv) In the context of South West Africa's rapidly expanding tourist industry, a game reserve in the western Kaokoveld has vast potentials as a tourist attraction, and in time this potential can be turned into an economic asset to the country as a whole and particularly to the people of the neighbouring homelands.
- (v) The Skeleton Coast Park as proposed by the Odendaal Commission consists of barren desert, and as such is unable to support any large mammal life.
- (vi) As no evidence was found of any large scale game migrations between the Etosha Game Park and the western Kaokoveld, there is insufficient justification for a corridor across valuable ranchland to link these two regions.
- (vii) Although the escarpment mountains are seasonally used by many of the semi-desert game animals, they need not necessarily be included in the game reserve. The ruggedness of this range generally prohibits agricultural development, making it into a natural buffer-zone between the inhabited highlands and a western wilderness.
- (viii) Although the Herero and Himba people have in the past seldom used the semi-desert region, they regard the whole Kaokoveld as belonging to them, and the need for a sympathetic understanding of their traditions and future requirements cannot be too heavily stressed. In the final analysis it will only be with their



co-operation that the viability of any game reserve in the Kaokoveld can be ensured.

- (ix) Conservation education is essential and local participation should be encouraged at all levels. In future a considerable portion of any revenue derived from tourism should be channelled directly to the existing trust funds and future homeland treasuries.
- (x) The grasslands of the semi-desert could probably be grazed by Himba cattle in occasional years of severe drought with little or no detrimental effect. As protected and controlled emergency grazing, these areas would be of infinitely greater long term value to the people of the Kaokoveld.
- (xi) The approximately 150 Himba now resident near Orupembe do not seriously threaten the wild life, and need not immediately be moved. In the future, however, these people could be persuaded to return to the more fertile highlands, by the provision of watering points in previously waterless areas on the western plateau.
- (xii) As the situation in the western areas of the new Damara Homeland is essentially similar to that in the Kaokoveld, it should be possible to extend a game reserve southward along the semi-desert to the Ugab river, thus linking it with the existing Brandberg Nature Reserve.

The past twenty years have already much changed the Kaokoveld scene. Today the inhospitable coast and rugged mountain ranges no longer afford sanctuary to the wild life of the region, and what is preserved of this irreplaceable heritage now depends entirely on us – the present generation of South Africans, and our elected representatives. We must accept the final responsibility.

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