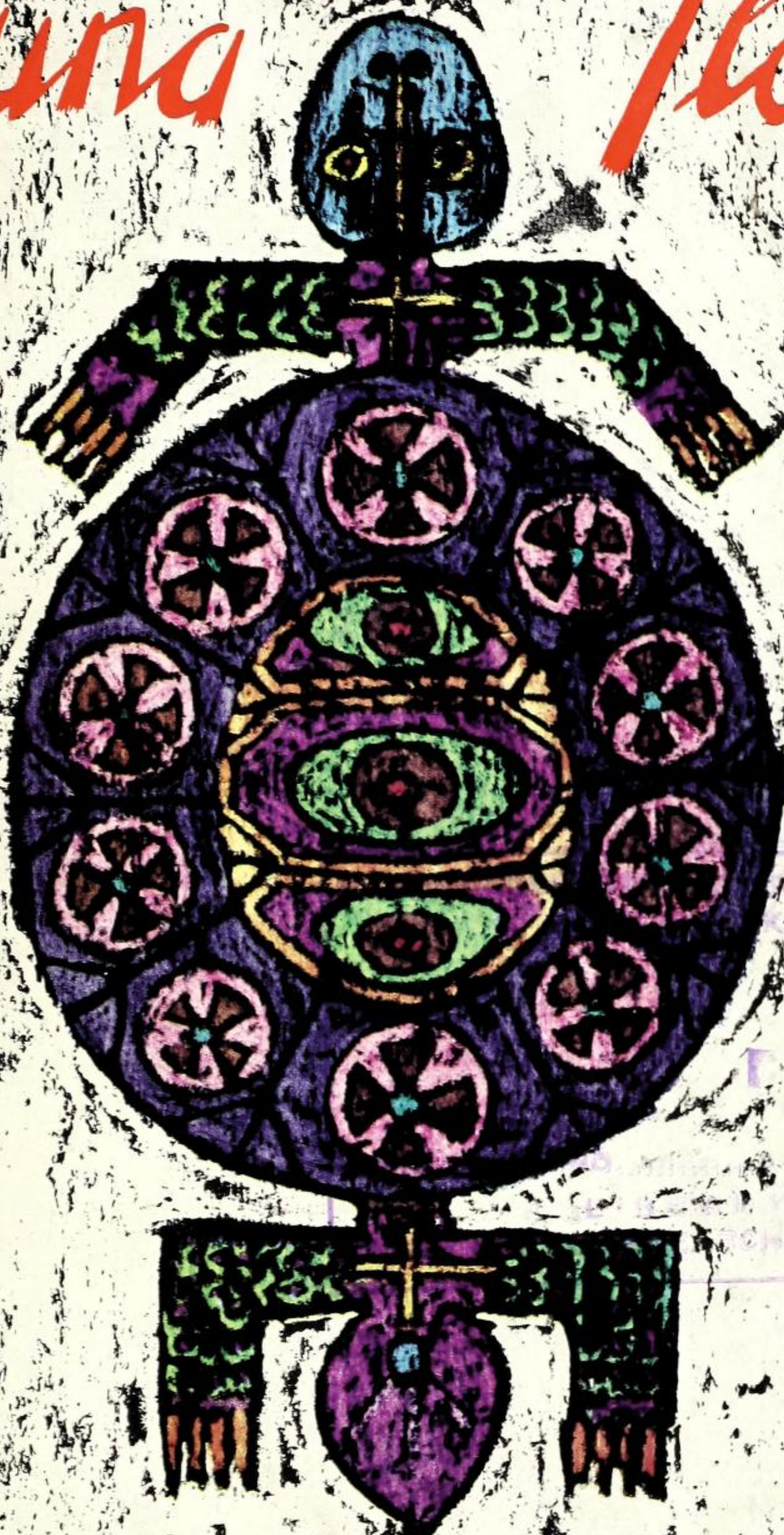


C.C.
2007/1

Fauna & Flora

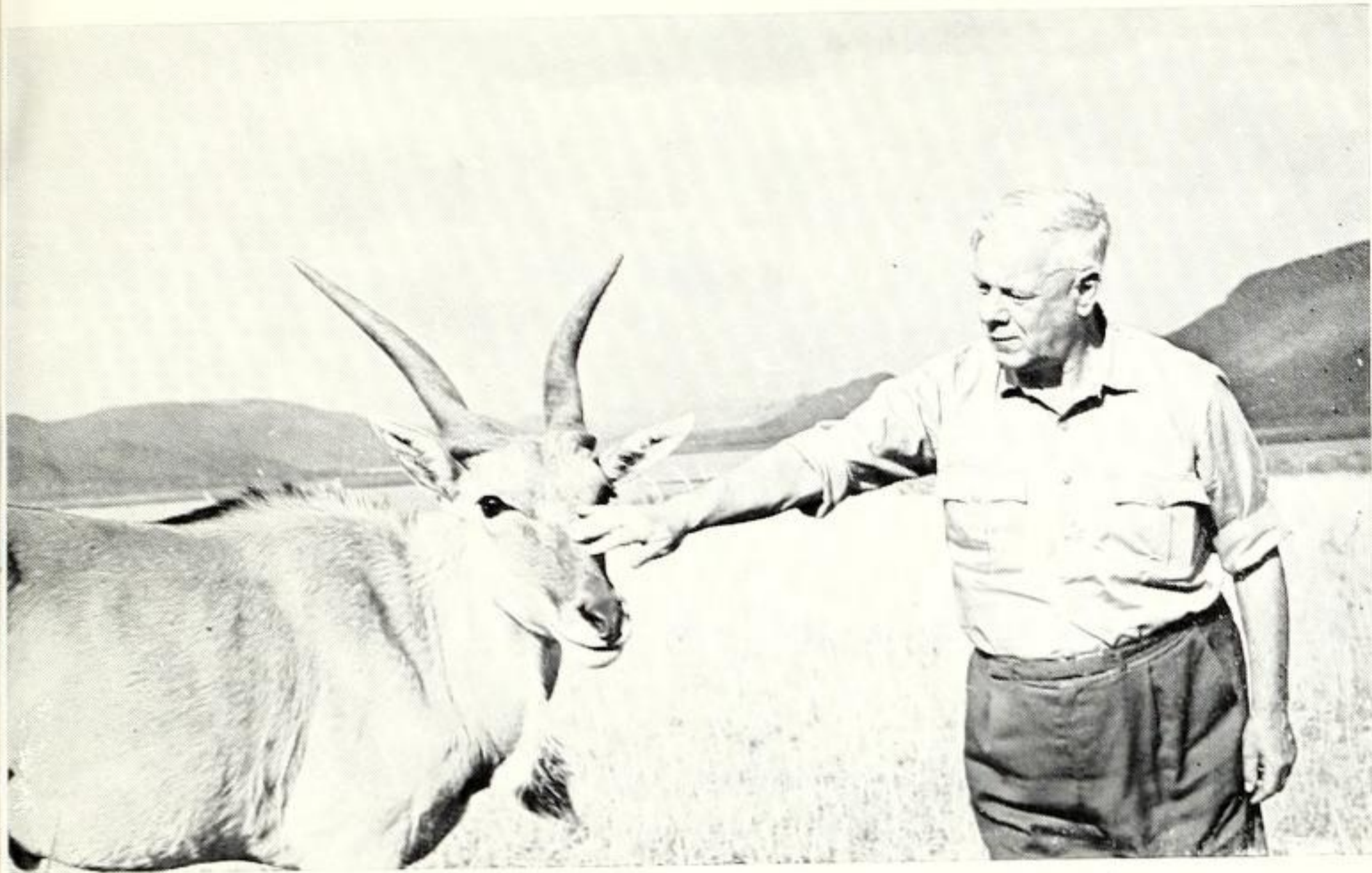


27 1966

TRANSVAAL
NATURAL HISTORY
MUSEUM
JOHANNESBURG

No. 17 1966





*The late Prime Minister, Dr. H. F. Verwoerd, with
a tame Eland in the Loskop Dam Nature Reserve.*

FAUNA & FLORA

AN OFFICIAL PUBLICATION OF THE
TRANSVAAL PROVINCIAL ADMINISTRATION

*The opinions expressed in this bulletin are not necessarily those of the
Nature Conservation Branch nor of the Administration*

*Editor: Dr. R. BIGALKE
Illustrated by: LOUIS STEYN*



Obtainable from:
DIRECTOR OF NATURE CONSERVATION
PRIVATE BAG 209, PRETORIA

CONTENTS

	Page
1. Game Farming and Hunting Areas — T. J. Steyn	1
2. The Small Rodents of the Transvaal: Some Taxonomic, Biogeographic, Economic and Health Problems — Dr. D. H. S. Davis	4
3. South Africa's First Game Reserve — Dr. R. Bigalke	13
4. Flowering Aquatic Plants in South Africa — Mrs. A. A. Mauve	19
5. Resurrection Plants — Mrs. A. A. Mauve	26
6. The Home Range of the Leopard Tortoise (<i>Geochelone pardalis</i> (Bell)) in the S. A. Lombard Nature Reserve, Bloemhof, Transvaal — J. H. M. van Zyl	32
7. Embryonic Implantation in the Springbok (<i>Antidorcas marsupialis marsupialis</i> (Zimmermann)) and Ovulation in the S.A. Buffalo (<i>Syncerus caffer caffer</i> (Sparrman)) in the S. A. Lombard Nature Reserve, Bloemhof, Transvaal — J. H. M. van Zyl	37
8. Coccidiosis in Antelopes — Dr. R. D. Bigalke	38
9. Publications	42

ADMINISTRATION OF THE PROVINCE OF TRANSVAAL

Administrator

The Hon. S. G. J. van Niekerk

Provincial Secretary

Mr. H. F. Cleaver

Director of Nature Conservation

Mr. T. J. Steyn, M.Sc.

Z W A Z I E L A N D

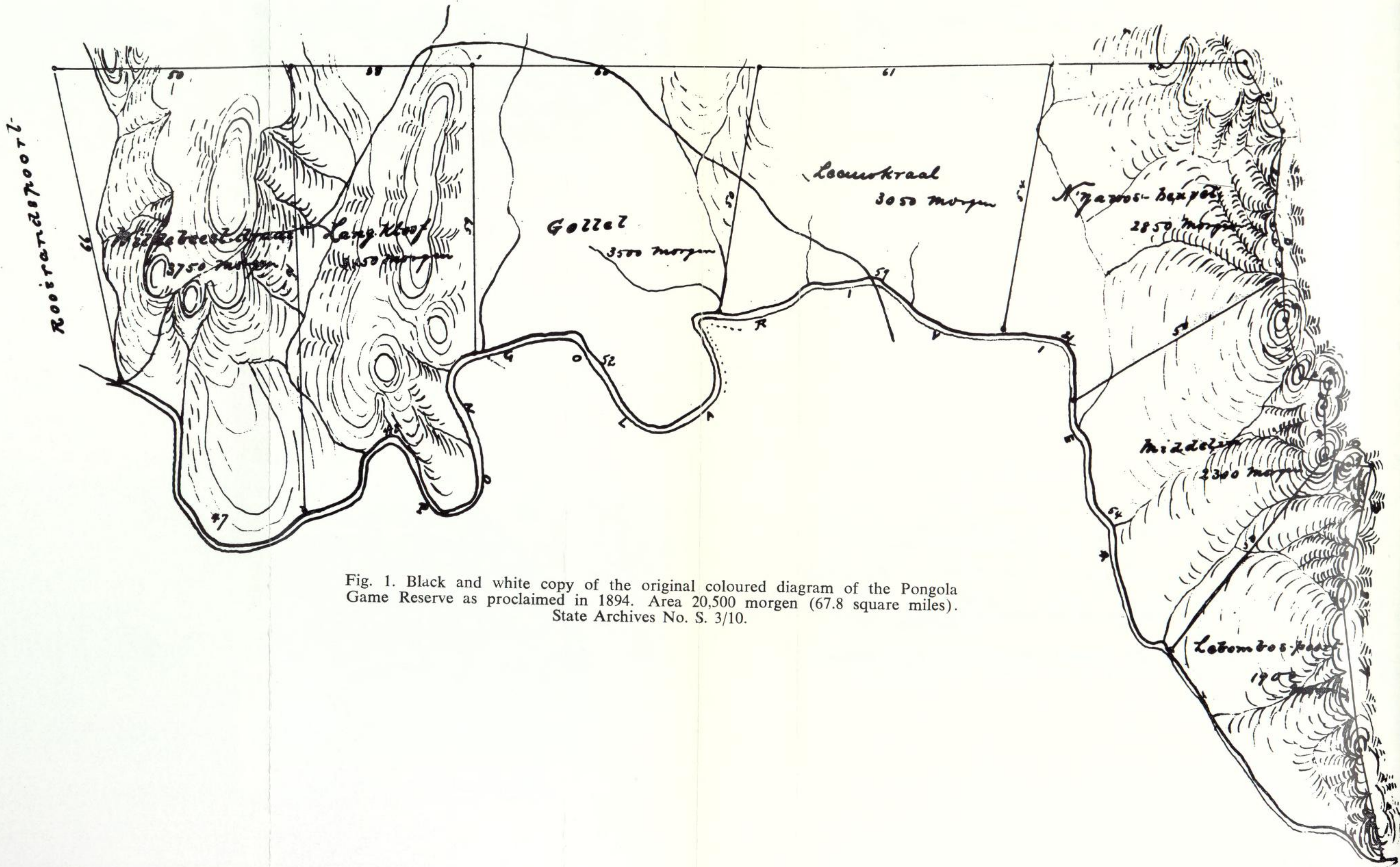


Fig. 1. Black and white copy of the original coloured diagram of the Pongola Game Reserve as proclaimed in 1894. Area 20,500 morgen (67.8 square miles). State Archives No. S. 3/10.

South Africa's first Game Reserve

R. Bigalke

IT is now generally realized that the Republic of South Africa is playing a very important part in the conservation of wild life. But very few people seem to be cognizant of the fact that the first game reserve in South Africa was proclaimed by the President of the South African Republic (now the Transvaal Province) as far back as 1894, or only twenty-two years after the world got its first national park, the Yellowstone National Park in the United States of America.

South Africa's first game reserve, and probably the first in the whole of Africa, was the Pongola Game Reserve. It lay in the narrow strip of territory in the Eastern Transvaal bounded by Swaziland on the north, the Lebombo Mountains on the east and the Pongola River on the south (Fig. 1).

For nature conservation in South Africa the 2 August, 1889, is a very important date, for it was on that day that the late S. J. P. Kruger, President of the S.A. Republic, spoke in the Volksraad in support of an Executive Council's resolution requesting that steps be taken to prohibit hunting on some of the Government's land. He pointed out that such action was necessary in view of the rapid rate at which the Republic's game animals were being destroyed (9). The President stated that where the Pongola River flows through the Lebombo Mountains there were still buffaloes, elephants and giraffes, and that it was this locality in which the Government was especially interested. He felt that in areas where there was little hunting it was especially important to preserve the game for future generations. The proposal was adopted with only two dissentients. Five years later, more precisely on the 27 August, 1894, the Volksraad agreed to the appointment of a warden for the Pongola Game Reserve at a salary of ten pounds per month (11). Somewhat later Mr. H. F. van Oordt was appointed to this post — the first game warden of the Transvaal.

Since the establishment of the Pongola Game Reserve is of great historical interest and importance, it is desirable to quote the proclamation that appeared in the "Staatscourant der Zuid-Afrikaansche Republiek" on the 13 June, 1894 (10). It reads as follows when translated:

PROCLAMATION R8009/89

"I, Stephanus, Johannes, Paulus Kruger, State President of the South African Republic, acting on the advice and with the consent of the Executive Council and authorized thereto by the Honourable Volksraad by resolution of the 2 August, 1889, article 1244, herewith make known and proclaim the following farms in the bushveld of the district Piet Retief between the Pongola, Swaziland and Lebombo as a GOVERNMENT GAME RESERVE viz.: Lebombopoort, Middelin, Njawós-

heuvel, Leeuwkraal, Gollel, Langkloof and Wildebeestdraai”.

“The boundaries of this Game Reserve are as follows: from beacon No. 1, a reddish rock, where the Rooderand reaches the Pongola River and where the waggon road is a narrow passage between the river and the rock; thence along the watershed of the Rooderand (Bandabande and Bompuhlela) up to the boundary of the S.A. Republic and Swaziland; thence along the aforesaid boundary line up to the point where the Lebombo Mountains and the Pongola River meet (Pongolapoort); thence along the Pongola River up to beacon No. 1” .

“Within this boundary one and all are prohibited from hunting, shooting, searching for, or in any manner taking possession of or trying to take possession of, chasing, driving away or disturbing game in any manner whatever”.

“Persons contravening these provisions will be punished by seizure of all game and shooting and hunting appliances in their possession and a fine not exceeding one hundred pounds sterling (£100). In default of payment imprisonment will be imposed for a period not exceeding one year”.

NOTE: In modern usage the word “wildtuin” used in the original proclamation is generally taken to be the equivalent of “national park”. But as the modern concept of a national park was hardly known in South Africa in 1894, and the early reserves were proclaimed as game reserves, it is this term that has been used above for “wildtuin”.

In the year 1903 (12) the Pongola Game Reserve was reproclaimed by the Colonial Government and remained in existence until the 12 January, 1921, when it was deproclaimed by Administrator's Proclamation No. 1, 1921 (13). But the latter provided for the protection of all game animals and game birds on the farms that constituted the reserve prior to deproclamation. How effective this protection was is not known.

It is a great pity that the Transvaal's first game reserve was abolished in the year 1921, and it is natural to enquire why such action was taken. No reason is given in the Administrator's Proclamation, nor have I been able to find any resolution concerned with this matter either in the Transvaal Executive Committee's Minutes or in the Votes and Proceedings of the Provincial Council. Curson and Hugo (1924) are no doubt correct in stating that the decision was taken in consequence of a nagana epizootic in Zululand in the year 1920. Since tsetse flies were present on the eastern side of the Lebombo Range along the Pongola River, it was feared that they might extend their range westwards along that river to the reserve, especially if the game animals moved to and fro (op. cit.). It was due to the fear that the disease might spread into Swaziland that Proclamation No. 39 of 1922 was issued by the Swaziland Administration (op. cit.). In this proclamation it is specifically stated “whereas it is desirable for the prevention of the spread of disease to enable game to be hunted throughout the year within a certain area in Swaziland . . . , I do hereby declare, proclaim etc.” The disease concerned was nagana, of which tsetse flies are the vectors; it was not known to exist on the western side of the Lebombo Mountains. About 160 square miles of a Swaziland game reserve were opened for hunting, as it was thought that this would prevent the spread of nagana by game from Zululand to Swaziland (op.

cit.). In this connection it is interesting to note what the warden of the Pongola Game Reserve, H. F. van Oordt, wrote in his second report (v. Oordt, 1896). He states that he had heard of complaints that tsetse flies had found their way into the reserve and goes on to say "if this were indeed the case, no one would suffer except myself and the police, since no one is entitled to be in this remote corner, but I am able to state that the rumour is devoid of all substance, since there are no flies at all in our reserve (i.e. the Pongola Game Reserve — author); during my residence of more than seven years in this area, I have never come across any (tsetse) flies. It seems as if they disappeared with the elephants".

In his first report the warden states (v. Oordt, 1895) that although game was very scarce in this reserve at first, it gradually began to increase and became tamer. As he took immediate steps to destroy all dogs, this resulted in most young animals reaching maturity. In this report he enumerates the following kinds of game animals as being present: Kudu, Waterbuck, Hartebeest, Tsessebe, Blue Wildebeest, Zebra, Impala, Reedbuck, Bushbuck, Mountain Reedbuck, Grey Duiker, Steenbuck, Klipspringer, Red Duiker, Inyala (very scarce), Warthog and Bushpig. Although the President referred to the presence of the Giraffe when he addressed the Volksraad in 1889 (see above), this must have been an error, since this animal is not mentioned in any of van Oordt's reports.

Now and then a few rhinos, Black as well as White, could be seen; he expected them to remain permanently once they realized that they were not being persecuted. African Elephants that used to visit the reserve were destroyed in Swaziland a few years previously. Hippos and lions are also mentioned, but during the year under review only tracks of five lions were seen; they had trekked through in wet weather from the Vryheid district to Swaziland. Leopards were plentiful but seldom seen; he set spring-guns for them. Hyaenas and wild dogs and even jackals were scarce, and thus francolins were plentiful and so tame that they frequented the vicinity of his house and came to look for food where his horses were kept. Duikers also fed at a distance of two to three hundred yards from his house, and guinea-fowls were also tame. Among the latter there was a very rare and pretty kind with a crest of black feathers on the head instead of the red casque of the other kind; its feathers are of a bluish-green colour, and it occurred for the most part on and near the Lebombo Mountains (this is the Crested Guinea-fowl *Guttera edouardi* — author).

It is of special interest that van Oordt records the occurrence of both the Hartebeest and the Tsessebe in the Pongola Game Reserve. As he also distinguished between the Black and the White Rhino (see above), it is clear that he was familiar with the country's big game. The hartebeest could only have been one of two species, namely either the Red Hartebeest (*Alcelaphus buselaphus*) or Lichtenstein's Hartebeest (*A. lichtensteini*), but unfortunately it is not possible to state with certainty which of the two kinds. Shortridge (1934) writes that Lichtenstein's Hartebeest is believed to have extended formerly as far south as Swaziland, and that the extinct Zululand Hartebeest, usually credited to have been the Cape (Red) Hartebeest, might possibly have been Lichtenstein's Hartebeest. Apart from these vague statements, Dr. C. Bigalke of the Natal Parks, Game and Fish Preservation Board, has

furnished me with a number of references on the occurrence of hartebeeste in Zululand, but only in one, that of Delegorgue (1847), is it mentioned that the animal was *Acronotus caama*, which is a synonym of the present name *Alcelaphus buselaphus* for the Red Hartebeest. If Delegorgue's identification is correct, then it is the Red Hartebeest that formerly occurred in Zululand, and most probably also this species seen by van Oordt in the Pongola Game Reserve.

Van Oordt (1895) states that since the game increased rapidly under strict protection during the first year, he cherished the hope that it would be very plentiful within a few years, and that other kinds would find their way into the reserve, especially from Zululand, where game was abundant. He mentions six zebras and several hartebeeste that found their way into the reserve from Swaziland shortly before he wrote the report.

An important antelope not mentioned in any of van Oordt's three reports is the Sable Antelope (*Hippotragus niger*). Elsewhere (Bigalke, 1955) I have dealt with this antelope's former distribution in the southern Low Veld of South Africa and indicated that the Komati River in Swaziland was roughly the southern limit of its distribution. Both this antelope and its cousin the Roan Antelope (*H. equinus*) did not occur in the Pongola Game Reserve, as they are not mentioned by van Oordt.

The greater part of the seven farms that constituted the original Pongola Game Reserve will be submerged when the Pongola Poort Dam (Josini Dam) is full. But a steep section of the Lebombo Mountains on the eastern side of the dam will not be submerged and will form a very imposing background for the dam. If an adjacent area on the Natal side of these mountains were also made available, a nature reserve of some size could be established. On account of its very rugged nature the Transvaal section would be a strict nature reserve. (Fig. 2A).

The unsubmerged parts of the farm Gollel and of the present farms Leeuwkraal and Nahala will form a continuous area that could also be a nature reserve and that will have suitable spots for rest-camps. This area will be separated from the other one by an arm of the dam, but as a nature reserve it will undoubtedly be very popular among tourists and anglers. (Fig. 2B).

Transvaal's Director of Nature Conservation is anxious to have a part of the original reserve reproclaimed as a nature reserve. For historical and prestige reasons it is very important that this should be done.

There is no doubt that anglers will flock to the Josini Dam, since a preliminary survey has revealed that the following kinds of fish are present in the Pongola River: *Labeo rosae*, *L. rubropunctatus*, *Clarias gariepinus*, *Hydrocynus vittatus*, *Tilapia mossambica* and a few smaller kinds.

Mr. M. van Biljon, Superintendent of Gardens of the Nature Conservation Branch, has explored most of the area of the Pongola Game Reserve as originally constituted and has kindly supplied the following information about the vegetation.

About eighty per cent of the total area lies between 500 and 1,000 feet above sea-level; it includes the western farms and a strip along the Pongola River. On its eastern side the Lebombo Range rises steeply from the river up to a height of about 2,000 feet. Two vegetation types can be distinguished in the area, the low-lying bushveld and the montane vegetation.

In the low-lying bushveld the temperature may go up to 108°F and here there are typical Low Veld trees like the Fever Tree (*Acacia xanthophloea*), Knob-thorn (*A. nigrescens*), Red Thorn (*A. gerrardi*), Red Ivory (*Phyllogeiton zeyheri*), Tambotie (*Spirostachys africana*), Wild Olive (*Olea africana*), Buffalo-thorn (*Ziziphus mucronata*), Sycamore Fig (*Ficus sycomorus*), Marula (*Sclerocarya caffra*), Wild Pear (*Dombeya rotundifolia*), Resin Tree (*Ozoroa paniculosa*), Red Bush-willow (*Combretum apiculatum*), Russet Bush-willow (*C. hereroense*), Naboom (*Euphorbia ingens*), Rubber Euphorbia (*E. tirucalli*) and many others. *Aloe umfoloziensis* and *A. parvibracteata* and their hybrids are widely distributed throughout the area. On a hill along the river there are specimens of *Aloe bainsii* the tallest of which is about 30 feet high.

Much, if not most, of the low-lying bushveld will be submerged when the Pongola River Dam is full.

The montane vegetation lies on the western slopes of the Lebombo Range. Here the gradient is very steep rising from about 500 feet along the river to 2,000 feet on top of the mountains. The vegetation is dense along the river but becomes more open as one proceeds upwards. There are thick bush patches on the slopes and in these one finds the cycad *Encephalartos lebomboensis*. The vegetation becomes more luxuriant in the poort, where there are also very large trees fringing the river.

Van Oordt's three reports are very valuable, not only because they are the first reports on the first game reserve in the Transvaal, but because no later reports were issued.

When the Pongola Game Reserve was reproclaimed in 1903, it was placed in charge of Stevenson-Hamilton (1937) and Major A. A. Fraser was stationed there. But when Hamilton visited the area in the same year, he came to the conclusion that it was not justifiable to keep the major in this small reserve with apparently little resident game, especially as a permanent white official was urgently needed in the large Shingwedzi Game Reserve of some four thousand square miles. Hence he decided to transfer Fraser thither and arranged to leave two Bantu police constables in charge of the Reserve under supervision of the magistrate at Ingwavuma. Fraser moved to Shingwedzi early the following winter (op. cit.). This arrangement, which remained in operation until the Pongola Game Reserve was deproclaimed in 1921, accounts for the fact that no reports on this reserve were submitted after it had been reproclaimed in 1903.

The help given by officials of the State Archives, the Provincial Archives and the State Library in tracing references, and also by Mr. Louis Steyn of the Nature Conservation Branch is gratefully acknowledged.

LITERATURE

1. BIGALKE, R. (1955). Notes on the former and present Occurrence of the Sable Antelope in the Southern Part of the Kruger National Park. Fauna and Flora, No. 6.
2. CURSON, H. H. and HUGO, J. M. (1924). Preservation of Game in South Africa. S.A. Journal of Science, Vol. XXI, Johannesburg.
3. DELEGORGUE, A. (1847). Voyage dans l'Afrique australe etc. Exécuté durant 1838-1844. Two vols. A. René et Ce. Paris.
4. SHORTRIDGE, G. C. (1934). The Mammals of South West Africa. Vol. 2. William Heinemann, London.
5. STEVENSON-HAMILTON, J. (1937). South African Eden. From Sabi Game Reserve to Kruger National Park. Cassell and Co., London.
6. VAN OORDT, H. F. (1895). Verslag over het eerste jaar van den Gouvernements-Wildtuin van 1 Augustus 1894 tot 1 Augustus 1895. Lebombo, 1895. State Archives S.S. 2031, 1889.
7. VAN OORDT, H. F. (1896). Tweede Jaarverslag van den Gouvernements-Wildtuin van 1 Augustus 1895 tot 1 Augustus 1896. Lebombo — district Piet Retief. State Archives S.S. 2031, 1889.
8. VAN OORDT, H. F. (1897). Derde Jaarverslag over den Goevernements Wildtuin van 1 Augustus 1896 tot en met 1 Augustus 1897. Goevernements Wildtuin, Wolfshoek, Lebombo, District Piet Retief, 1897. State Archives S.S.2031, 1889.
9. Bijvoegsel tot de Staatscourant der Zuid-Afrikaansche Republiek. 7 Augustus 1889, Bl. 15, Art. 1244.
10. Staatscourant der Zuid-Afrikaansche Republiek, Woensdag 13 Junie 1894. Deel XIV, No. 712. Proclamatie R.8009/89.
11. Notulen der Verrichtingen van den Hoog-Edel Achtbaren Eersten Volksraad der Zuid-Afrikaansche Republiek. 27 Augustus 1894, Bl. 561, Art. 1494 en Bl. 562, Art. 1495.
12. Transvaal Government Gazette, 5 June, 1903, Vol. VI, No. 198. Proclamation No. 17 Admn. 1903.
13. The Province of Transvaal, Official Gazette, 12 January, 1921. Vol. XXXVI, No. 579. Proclamation No. 1 (Administrator's) 1921.