

A SUMMARY OF THE RE-INTRODUCTION OF UNGULATES INTO SOUTH AFRICAN NATIONAL PARKS (TO 31 DECEMBER 1970)

by

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Abstract—In an attempt to approximate the original wildlife composition in areas proclaimed as national parks, re-introductions of ungulates have taken place. This is discussed briefly.

Introduction

A national park in Africa usually signifies a wealth of wildlife, both in variety and numbers. This is generally the reason why the area was set aside for protection in the first place. In the Republic of South Africa, however, with its long history of European settlement, special problems were encountered with the proclamation of national parks because large areas of agricultural land had become practically depleted of wildlife during the course of the decades or centuries of farming activities.

Although the area now comprising the Kalahari Gemsbok National Park had been heavily hunted prior to its proclamation as a national park (Kloppers, 1970), immigration of wildlife from the neighbouring areas in Botswana was possible and the park today contains a spectrum of species probably approximating the original condition.

The same applies to the Kruger National Park, although to a lesser degree, for two or three species disappeared from the area immediately prior to, or some time after, its proclamation (Pienaar, 1963).

The so-called "species reserves" presented another picture altogether, for the wildlife in these areas had been radically disturbed and in certain cases even extirpated.

It became the policy of the National Parks Board of Trustees to attempt to approximate as closely as possible the original wildlife component in every national park, wherever practical. Large-scale re-introductions have taken place and generally care was taken to ascertain beforehand which species used to occur in the areas which later constituted the national parks. These re-introductions were mostly confined to ungulates, the only other mammals being small carnivores, i.e. silver jackal *Vulpes chama*, bat-eared fox *Otocyon megalotis* and black-footed cat *Felis nigripes* which were released in the Mountain Zebra National Park. Ostriches *Struthio camelus* have also been re-introduced into a number of national parks.

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This summary is an attempt at documenting the re-introduction of ungulates into South African national parks. In addition to the references cited, I also obtained information from annual reports of the National Parks Board, correspondence in the Board's files and from Mr. J. H. D. le Riche, Mr. C. S. le Roux, Mr. P. F. van Straaten, Mr. A. J. van Zyl and the late Mr. R. J. Labuschagne.

In most cases there is no accurate documentation of the number and sex of the re-introduced animals.

Kruger National Park

White or square-lipped rhino *Ceratotherium simum* had disappeared from the lowveld of the Transvaal when the Sabie Game Reserve (forerunner of the Kruger National Park) was proclaimed in 1898. It has been successfully re-introduced from Natal (Pienaar, 1970).

Black rhino *Diceros bicornis* were present in the park in small numbers during the first decades of the century but the last living specimen was seen in 1936 and by 1945 it was accepted that they had become extinct in the park. This species has recently been re-introduced, also from Natal.

Oribi *Ourebia ourebi* occurred in very small numbers in the park, but have probably become extinct (Pienaar, 1963). An attempt has been made to re-introduce this species (Pienaar and van Niekerk, 1963).

Addo Elephant National Park

In addition to the African elephant *Loxodonta africana*, the dense and practically impenetrable Addo bush sheltered the following species of ungulates when the park was proclaimed in 1931: African buffalo *Syncerus caffer*, bushbuck *Tragelaphus scriptus*, grysbok *Raphicerus melanotis*, grey duiker *Sylvicapra grimmia* and bushpig *Potamochoerus porcus*.

The park was also suitable for antelope and the following species which formerly occurred in the area (Skead, 1958) have been re-introduced: eland *Taurotragus oryx*, kudu *Tragelaphus strepsiceros*, reedbuck *Redunca arundinum*, mountain reedbuck *Redunca fulvorufula*, grey rhebok *Petea capreolus*, red hartebeest *Alcelaphus buselaphus caama* (Ansell, 1968) and springbok *Antidorcas marsupialis*.

In some species the re-introductions were successful to the extent that Addo has served as a source for re-introductions into other national parks. Eland, originally from Kalahari Gemsbok National Park stock, and red hartebeest have been supplied to the Golden Gate Highlands National Park.

With the addition of Caesar's Dam to the park a suitable habitat for hippopotami *Hippopotamus amphibius* was acquired. Hippo captured in the Olifants River in the Kruger National Park were transported to Addo, a distance exceeding 1600 km, and released at the dam (van Niekerk and Pienaar, 1962).

In March 1961 a pair of black rhino *Diceros bicornis*, donated by the

Kenya Game Department, was released in the park. In February 1962 a further five arrived (Carter, 1965). They probably represent the subspecies *D. b. michaeli* (Groves, 1967).

Mountain Zebra National Park

When the Mountain Zebra National Park was proclaimed in 1937 it contained, in addition to the Cape Mountain Zebra *Equus zebra zebra*, the following ungulates: klipspringer *Oreotragus oreotragus*, steenbok *Raphicerus campestris*, grey duiker and mountain reedbuck as well as the ubiquitous dassie *Procavia capensis*.

The first re-introduction took place in the early 1940s when a number of springbok from the Grahamstown district were released in the park. This re-introduction was extremely successful. During 1960 and 1961 a number of springbok from this park was supplied to the Bontebok National Park. They settled down very well and after a few years their number had increased to such an extent that some could be supplied to the Golden Gate Highlands National Park. Springbok from the Mountain Zebra National Park were also supplied to Addo Elephant National Park and Golden Gate Highlands National Park.

Other antelope which were re-introduced are eland, gemsbok *Oryx gazella*, reedbuck, red hartebeest, blesbok *Damaliscus dorcas phillipsi* (Ansell, 1968) and black wildebeest *Connochaetes gnou*. The blesbok came from three sources (*vide* Table) and are doing extremely well. A number was supplied to the Golden Gate Highlands National Park.

According to von Richter (1971) a total of 21 black wildebeest were re-introduced between 1956 and 1963.

Bontebok National Park

The Bontebok National Park was originally proclaimed near Bredsdorp in 1931. For a number of reasons (Barnard and Van der Walt, 1961) it was decided to move the park to a new site just south of Swellendam. During 1960 practically all the bontebok *Damaliscus dorcas dorcas* (Ansell, 1968) as well as the red hartebeest which had been re-introduced, were relocated. The new park, which had been part of the Swellendam commonage, already contained grey rhebok, steenbok and grey duiker. Subsequently, after a survey by Bateman (1961), Cape buffalo, eland, bushbuck, reedbuck and springbok were re-introduced.

Golden Gate Highlands National Park

The Golden Gate Highlands National Park was proclaimed primarily for its scenic values. The farms which were acquired and turned into a national park (Van Rensburg, 1968) were practically devoid of wildlife. That the area teemed with game in historic times, was evident (Liebenberg, 1964). The only ungulates occurring in the area when the park was

proclaimed in 1963 were the dassie, steenbok and grey rhebok. The following ungulates have subsequently been re-introduced: Burchell's zebra *Equus burchelli*, warthog *Phacochoerus aethiopicus*, Cape buffalo, eland, reedbuck, mountain reedbuck, red hartebeest, blesbok, black wildebeest, springbok and oribi.

According to von Richter (1971), a total of 83 black wildbeest were re-introduced between 1963 and 1968.

Acknowledgements

Thanks are due to Dr. U. de V. Pienaar and Mr. W. F. H. Ansell for commenting on the manuscript and to Mr. A. O. Zaayman for making photographic reproductions of the maps.

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Table

The re-introduction of ungulates into South African National Parks (to 31 December 1970)

<i>Species</i>	<i>Park to which re-introduced</i>	<i>Source</i>
ORDER: PERISSODACTYLA		
Fam.: Rhinocerotidae		
<i>Diceros bicornis</i>	Addo Elephant N.P.	Kenya
<i>Ceratotherium simum</i>	Kruger N.P.	Umfolozi Game Reserve, Natal
Fam.: Equidae		
<i>Equus burchelli</i>	Golden Gate Highlands N.P.	Kruger N.P.
ORDER: ARTIODACTYLA		
Fam.: Hippopotamidae		
<i>Hippopotamus amphibius</i>	Addo Elephant N.P.	Kruger N.P.
Fam.: Suidae		
<i>Phacochoerus aethiopicus</i>	Golden Gate Highlands N.P.	Hluhluwe Game Reserve, Natal
Fam.: Bovidae		
<i>Syncerus caffer</i>	Bontebok N.P. Golden Gate Highlands N.P.	Addo Elephant N.P. Addo Elephant N.P.
<i>Taurotragus oryx</i>	Addo Elephant N.P. Bontebok N.P. Golden Gate Highlands N.P.	Kalahari Gemsbok N.P. Kalahari Gemsbok N.P. Kalahari Gemsbok N.P.
		Addo Elephant N.P. Willem Pretorius Game Reserve, O.F.S.
	Mountain Zebra N.P.	Kalahari Gemsbok N.P. Middelburg, C.P. Bloemfontein, O.F.S.
<i>Tragelaphus scriptus</i>	Bontebok N.P.	Humansdorp, C.P.
<i>Tragelaphus strepsiceros</i>	Addo Elephant N.P.	Grahamstown, C.P. Jansenville, C.P. Uitenhage, C.P.
<i>Oryx gazella</i>	Mountain Zebra N.P.	Kalahari Gemsbok N.P.
<i>Redunca arundinum</i>	Addo Elephant N.P. Bontebok N.P. Golden Gate Highlands N.P. Mountain Zebra N.P.	Northam, Tvl. Northam, Tvl. Northam, Tvl. Northam, Tvl.

<i>Species</i>	<i>Park to which re-introduced</i>	<i>Source</i>
<i>Redunca fulvorufula</i>	Addo Elephant N.P.	Bedford, C.P.
	Golden Gate Highlands N.P.	Lückhof, O.F.S. Bedford, C.P. Somerset East, C.P. Umtata, Transkei
<i>Pelea capreolus</i>	Addo Elephant N.P.	Bontebok N.P.
<i>Alcelaphus buselaphus caama</i>	Addo Elephant N.P.	Kalahari Gemsbok N.P. Sommerville Game Reserve, O.F.S.
	Bontebok N.P.	Kalahari Gemsbok N.P.
	Golden Gate Highlands N.P.	Addo Elephant N.P. Kalahari Gemsbok N.P. Willem Pretorius Game Reserve, O.F.S. Rooipoort Estates, Kimberley, C.P.
	Mountain Zebra N.P.	Setlagodi, C.P. Kalahari Gemsbok N.P. Setlagodi, C.P.
<i>Damaliscus dorcas phillipsi</i>	Golden Gate Highlands N.P.	Mountain Zebra N.P. Willem Pretorius Game Reserve, O.F.S. Van Riebeeck Nature Reserve, Pretoria, Tvl. Kestell, O.F.S. Petrus Steyn, O.F.S. Pietersburg, Tvl. Nduli Nature Reserve, Umtata, Transkei
	Mountain Zebra, N.P.	Sommerville Game Reserve, O.F.S. Van Riebeeck Nature Reserve, Pretoria, Tvl. Kransfontein, O.F.S.
		Willem Pretorius Game Reserve, O.F.S. Odendaalsrus, O.F.S. Frankfort, O.F.S. Makwassie, Tvl.
		Sommerville Game Reserve, O.F.S. Willem Pretorius Game Reserve, O.F.S. Odendaalsrus, O.F.S. Rooipoort Estates, Kimberley, C.P.
<i>Connochaetes gnou</i>	Golden Gate Highlands N.P.	Makwassie, Tvl. Mountain Zebra N.P.
	Mountain Zebra N.P.	Sommerville Game Reserve, O.F.S. Willem Pretorius Game Reserve, O.F.S. Odendaalsrus, O.F.S. Rooipoort Estates, Kimberley, C.P.
<i>Antidorcas marsupialis</i>	Addo Elephant N.P.	Makwassie, Tvl. Mountain Zebra N.P.

Species

Park to which re-introduced

Source

Ourebia ourebi

Bontebok N.P.
Golden Gate Highlands
N.P.

Mountain Zebra N.P.
Golden Gate Highlands
N.P.
Kruger N.P.

Nduli Nature Reserve,
Umtata, Transkei
Mountain Zebra N.P.
Bontebok N.P.
Kalahari Gemsbok N.P.
Mountain Zebra N.P.
Cookhouse, C.P.
Grahamstown
Greytown, Natal
Badplaas, Tvl.
Barberton, Tvl.
Carolina, Tvl.

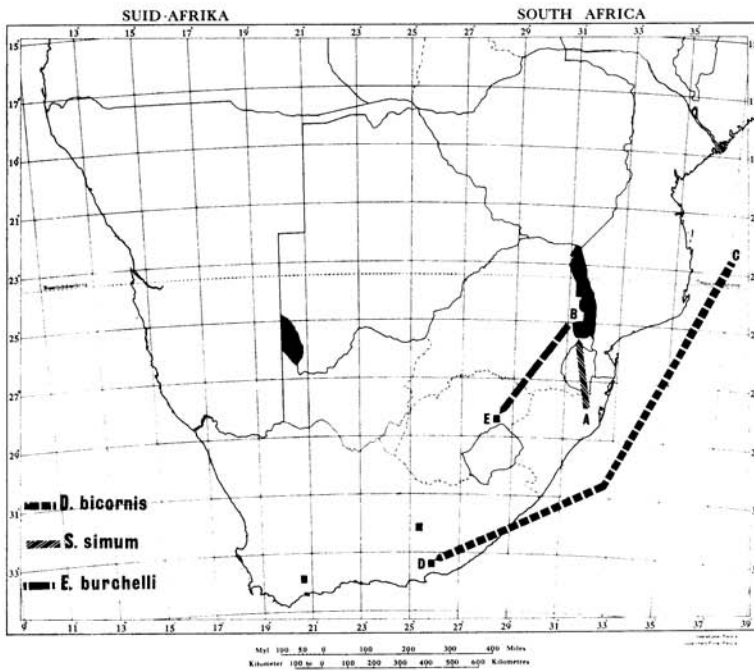


Fig. 1 Translocation of *Ceratotherium simum* from Umfolozi Game Reserve Natal (A) to the Kruger National Park (B); *Diceros bicornis* from Kenya (C) to Addo Elephant National Park (D) and *Equus burchelli* from the Kruger National Park to the Golden Gate Highlands National Park (E).

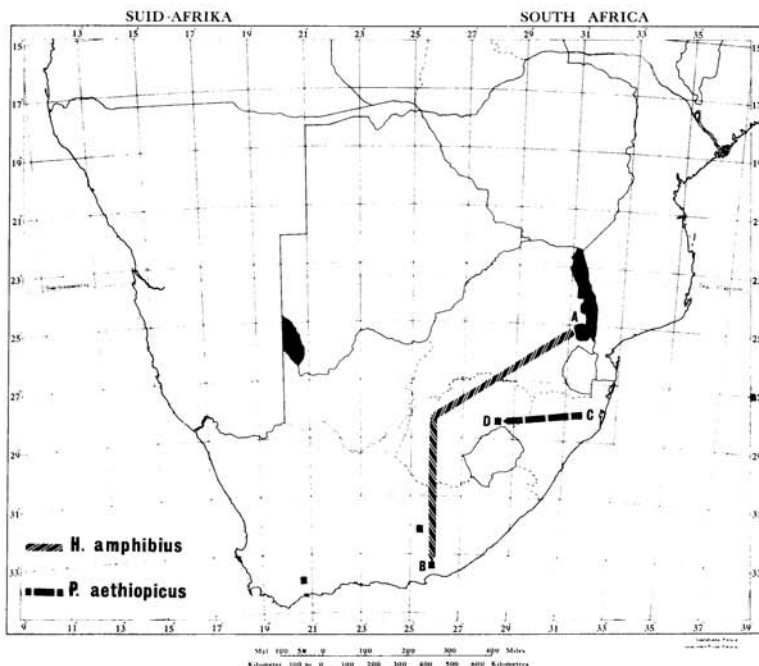


Fig. 2 Translocation of *Hippopotamus amphibius* from the Kruger National Park (A) to Addo Elephant National Park (B) and of *Phacochoerus aethiopicus* from Hluhluwe Game Reserve, Natal (C) to Golden Gate Highlands National Park (D).

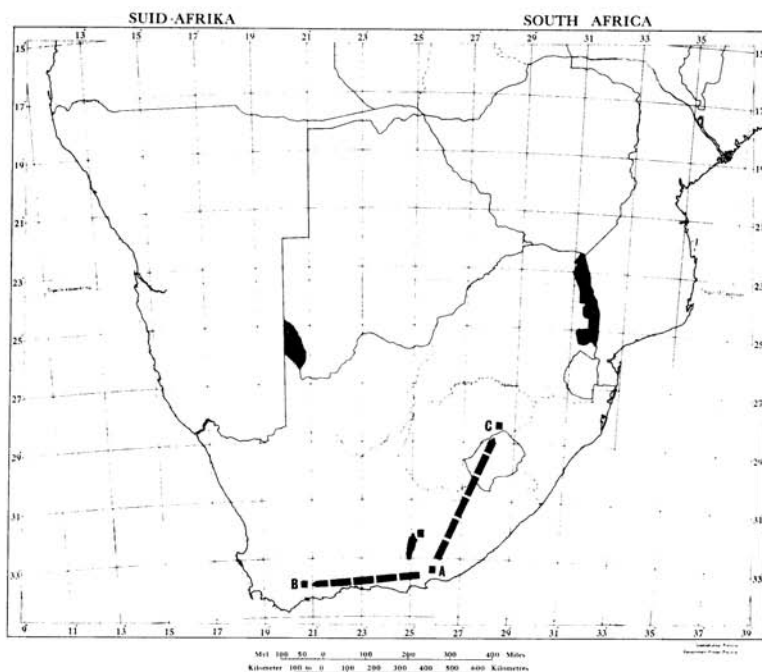


Fig. 3 Translocation of *Syncerus caffer* from the Addo Elephant National Park (A) to the Bontebok National Park (B) and Golden Gate Highlands National Park (C).

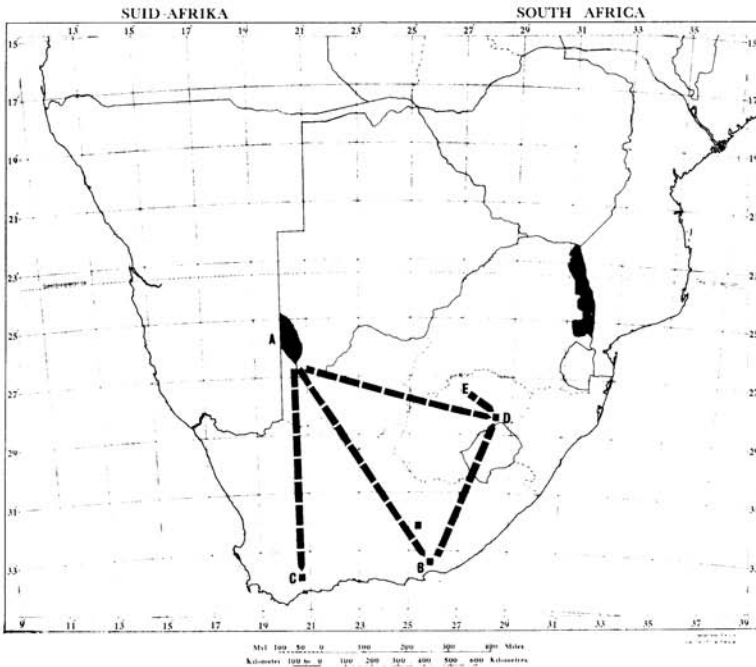


Fig. 4 Translocation of *Taurotragus oryx* from the Kalahari Gemsbok National Park (A) to Addo Elephant National Park (B), Bontebok National Park (C) and Golden Gate Highlands National Park (D) and from Addo Elephant National Park and Willem Pretorius Game Reserve, O.F.S. (E) to Golden Gate Highlands National Park.

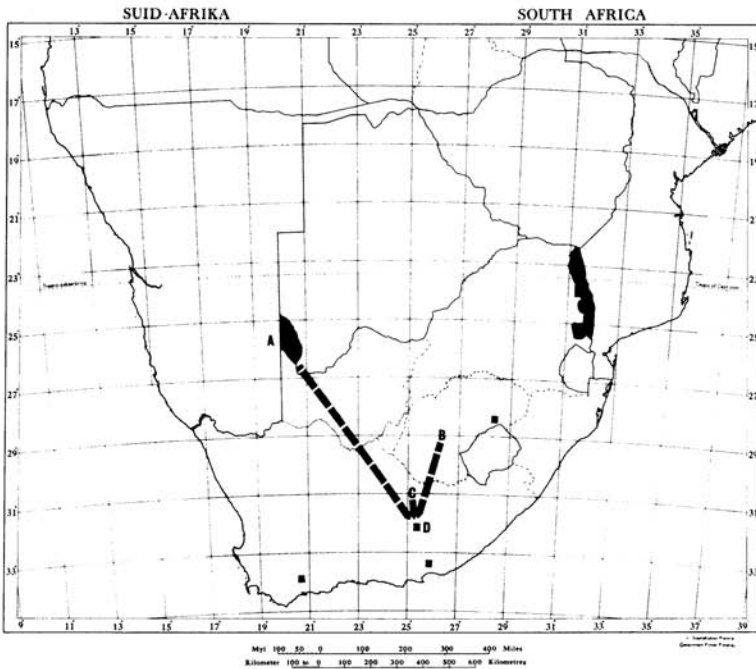


Fig. 5 Translocation of *Taurotragus oryx* from the Kalahari Gemsbok National Park (A), Bloemfontein, O.F.S. (B) and Middelburg, C.P. (C) to Mountain Zebra National Park (D).

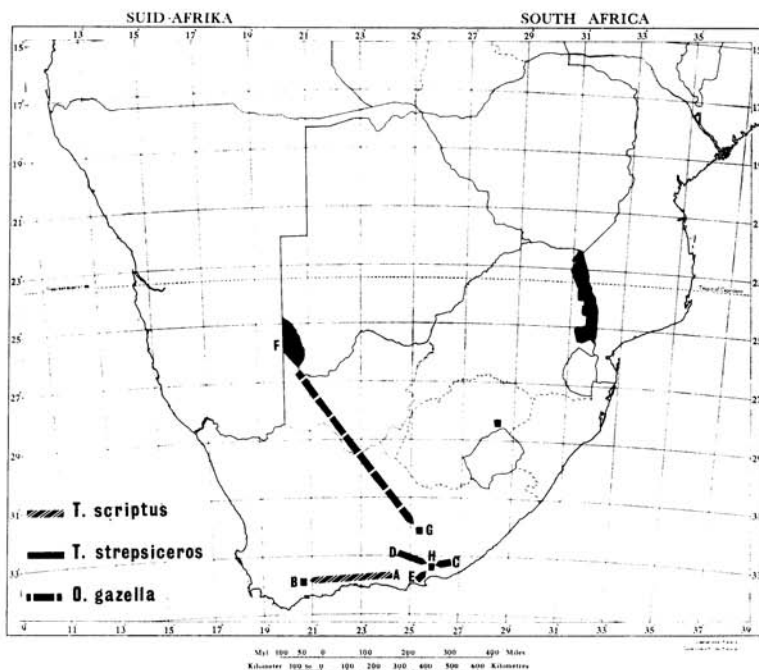


Fig. 6 Translocation of *Tragelaphus scriptus* from Humansdorp, C.P. (A) to Bontebok National Park (B); *T. strepsiceros* from Grahamstown, C.P. (C), Jansenville, C.P. (D) and Uitenhage, C.P. (E) to Addo Elephant National Park (H) and of *Oryx gazella* from the Kalahari Gemsbok National Park (F) to Mountain Zebra National Park (G).

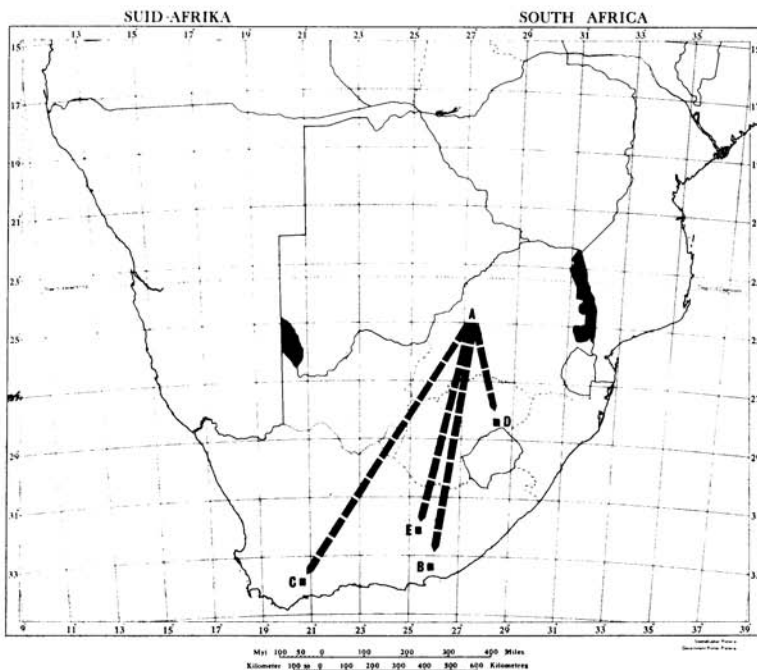


Fig. 7 Translocation of *Redunca arundinum* from Northam, Tvl. (A) to Addo Elephant National Park (B), Bontebok National Park (C), Golden Gate National Park (D) and Mountain Zebra National Park (E).

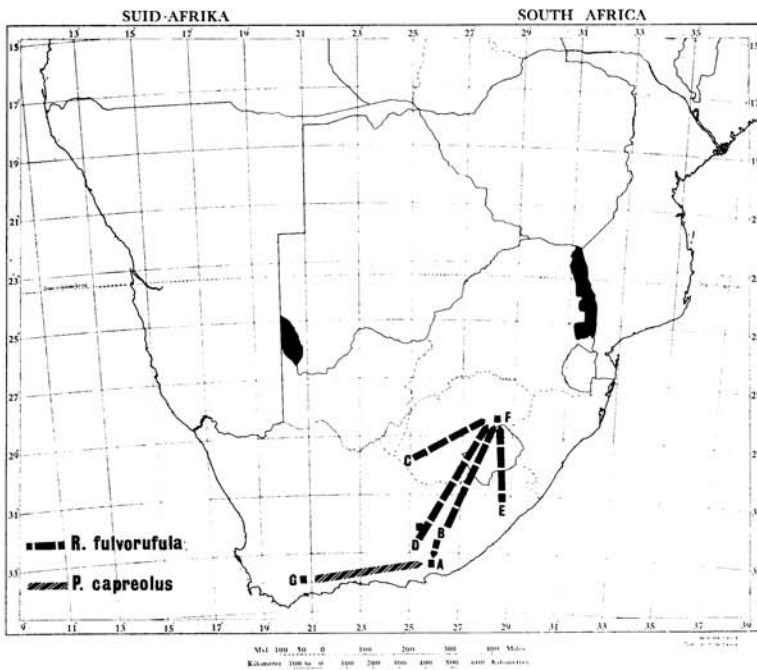


Fig. 8 Translocation of *Redunca fulvorufula* from Bedford, C.P. (B) to Addo Elephant National Park (A) and from Bedford, Lückhof, O.F.S. (C), Somerset East, C.P. (D) and Nduli Nature Reserve, Umtata, Transkei (E) to Golden Gate National Park (F) and of *Pelea capreolus* from Bontebok National Park (G) to Addo Elephant National Park.

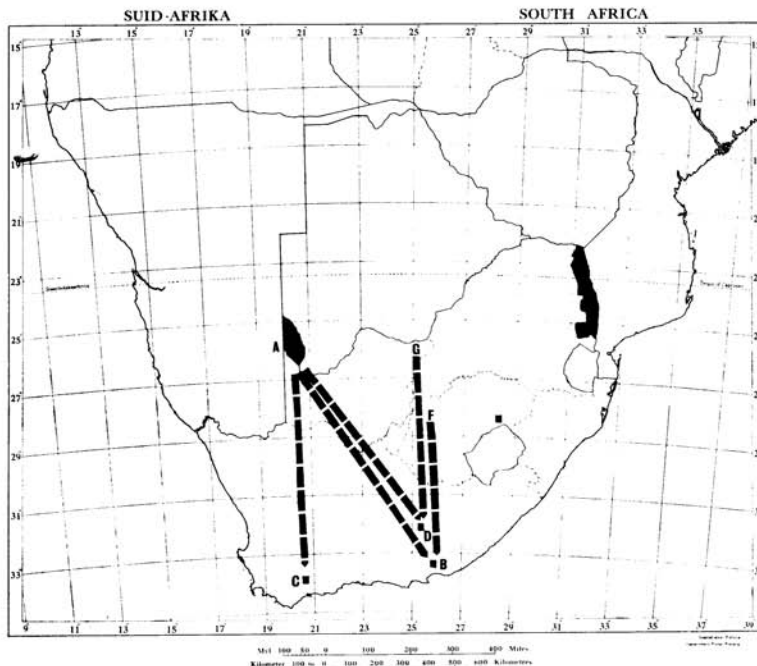


Fig. 9 Translocation of *Alcelaphus buselaphus caama* from the Kalahari Gemsbok National Park (A) to Addo Elephant National Park (B), Bontebok National Park (C) and Mountain Zebra National Park (D), from Sommerville Game Reserve, O.F.S. (F) to Addo Elephant National Park and from Setlagodi, C.P. (G) to Mountain Zebra National Park.

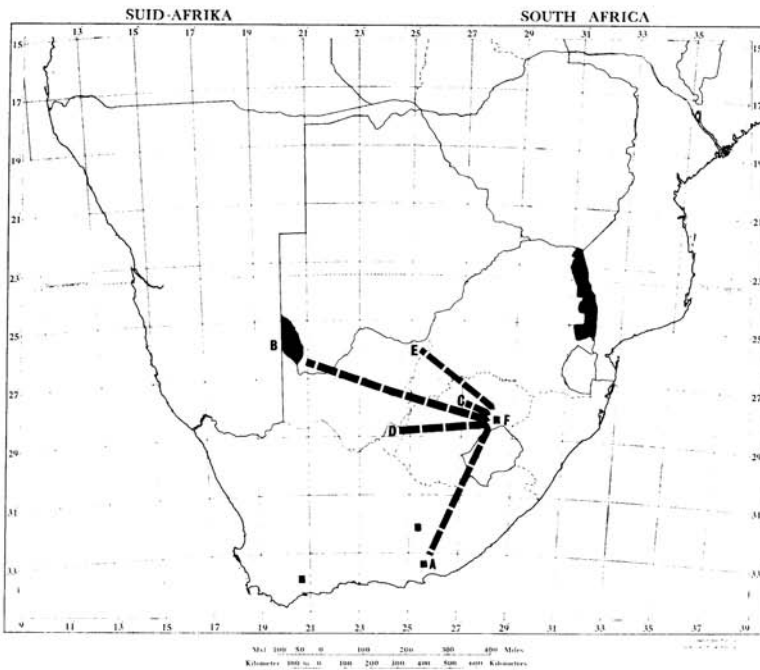


Fig. 10 Translocation of *Alcelaphus buselaphus caama* from Addo Elephant National Park (A), Kalahari Gemsbok National Park (B), Willem Pretorius Game Reserve, O.F.S. (C), Rooipoort Estates, Kimberley, C.P. (D), Setlagodi, C.P. (E) to Golden Gate Highlands National Park (F).

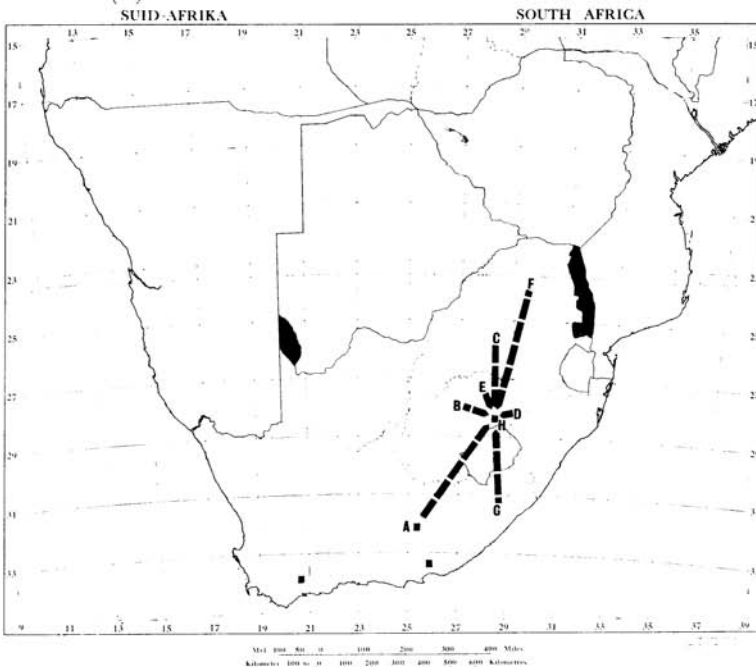


Fig. 11 Translocation of *Damaliscus dorcas phillipsi* from Mountain Zebra National Park (A), Willem Pretorius Game Reserve, O.F.S. (B), Van Riebeeck Nature Reserve, Pretoria, Tvl. (C), Kestell, O.F.S. (D), Petrus Steyn, O.F.S. (E), Pietersburg, Tvl. (F) and Nduli Nature Reserve, Umtata, Transkei (G) to Golden Gate Highlands National Park (H).

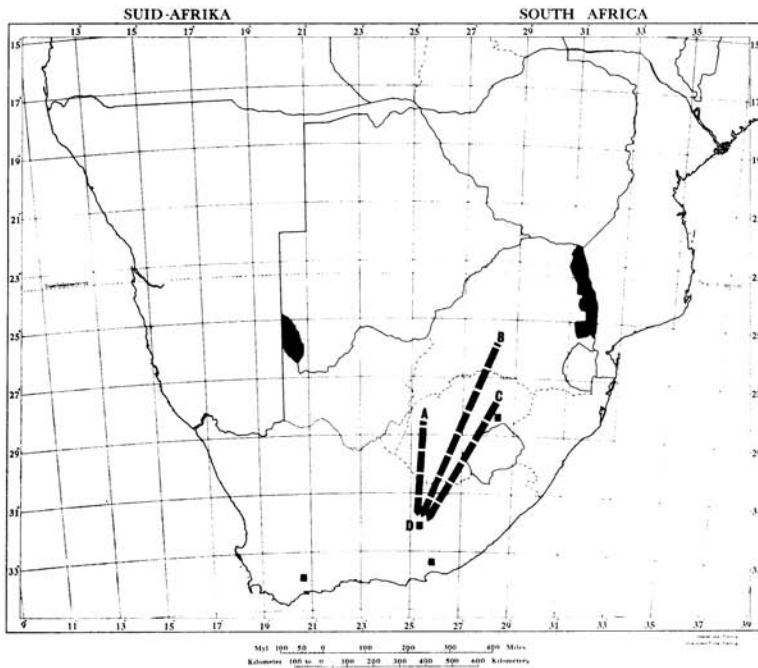


Fig. 12 Translocation of *Damaliscus dorcas phillipsi* from Sommerville Game Reserve, O.F.S. (A), Van Riebeeck Nature Reserve, Pretoria, Tvl. (B) and Kransfontein, O.F.S. (C) to Mountain Zebra National Park (D).

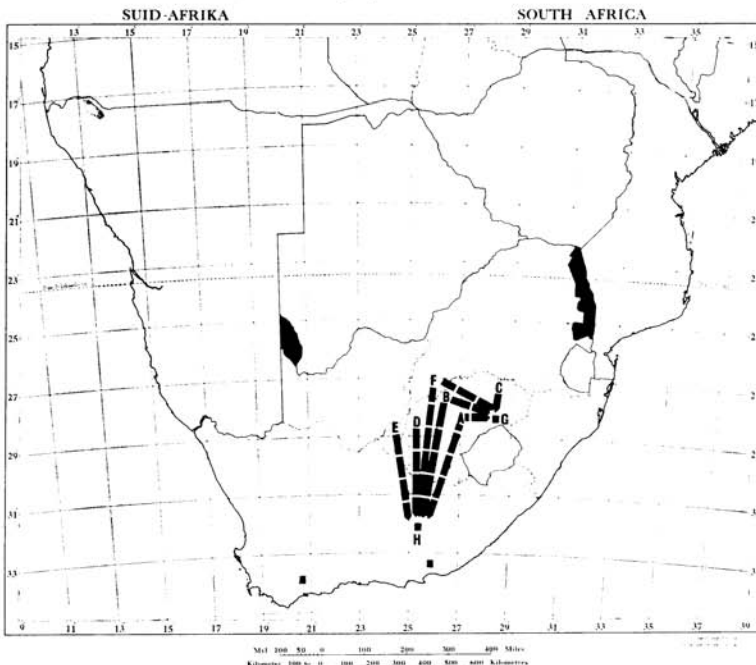


Fig. 13 Translocation of *Connochaetes gnou* from Willem Pretorius Game Reserve, O.F.S. (A), Odendaalsrus, O.F.S. (B), Frankfort, O.F.S. (C) and Makwassie, Tvl. (F) to Golden Gate Highlands National Park and from Sommerville Game Reserve, O.F.S. (D), Rooipoort Estates, Kimberley, C.P. (E) and Makwassie, Tvl. to Mountain Zebra National Park (H).

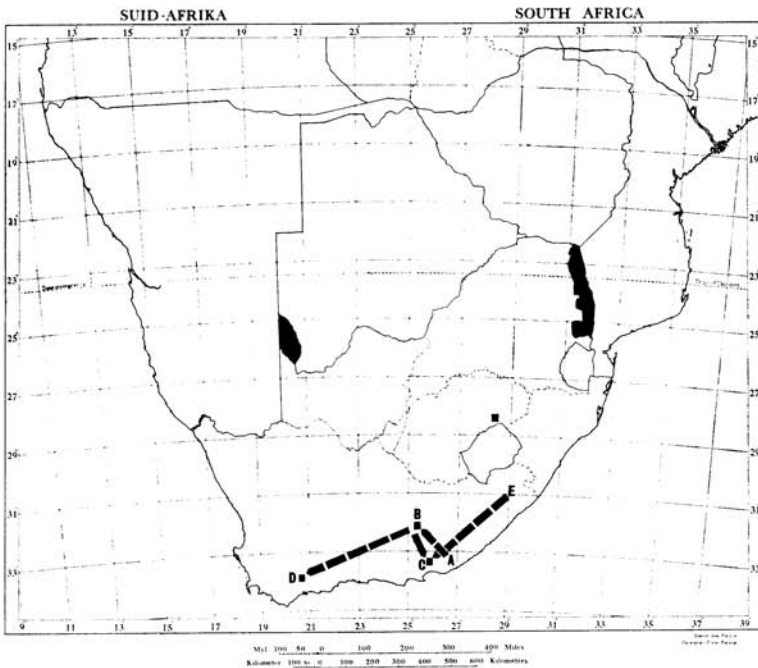


Fig. 14 Translocation of *Antidorcas marsupialis* from Grahamstown, C.P. (A) to Mountain Zebra National Park (B) and thence to Addo Elephant National Park (C) and Bontebok National Park (D) and from Nduli Nature Reserve, Umtata, Transkei (E) to Addo Elephant National Park.

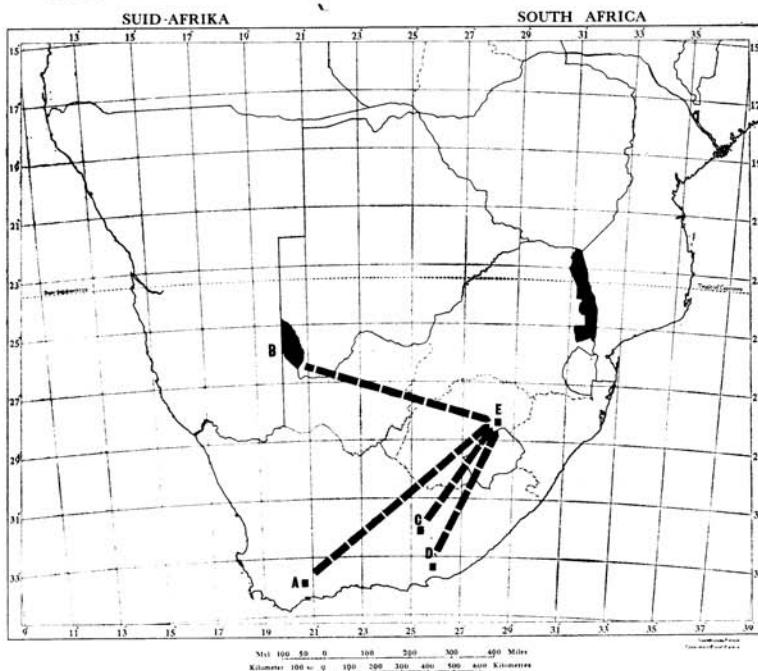


Fig. 15 Translocation of *Antidorcas marsupialis* from Bontebok National Park (A), Kalahari Gemsbok National Park (B), Mountain Zebra National Park (C) and Cookhouse, C.P. (D) to Golden Gate Highlands National Park (E).

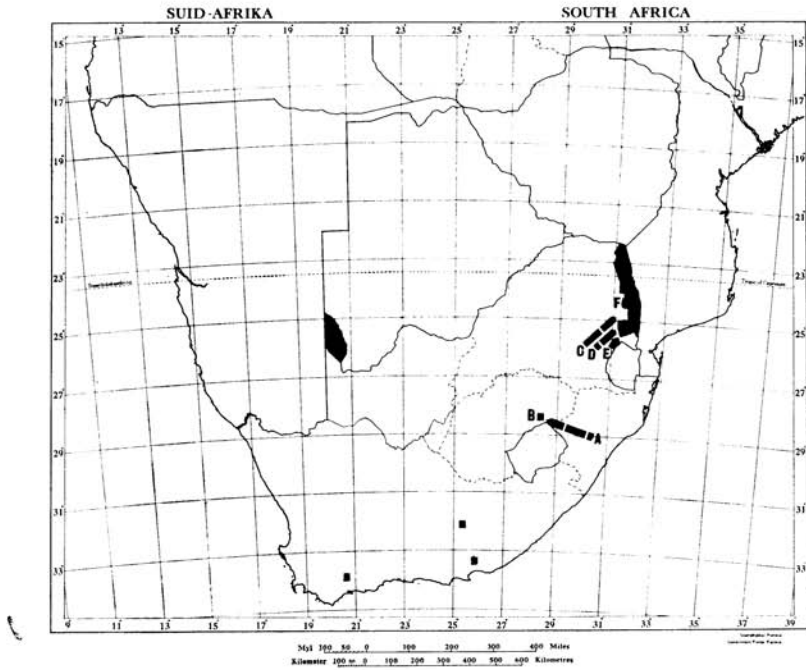


Fig. 16 Translocation of *Ourebia ourebi* from Greytown, Natal (A) to Golden Gate Highlands National Park (B) and from Carolina, Tvl. (C), Badplaas, Tvl. (D) and Barberton, Tvl. (E) to the Kruger National Park (F).