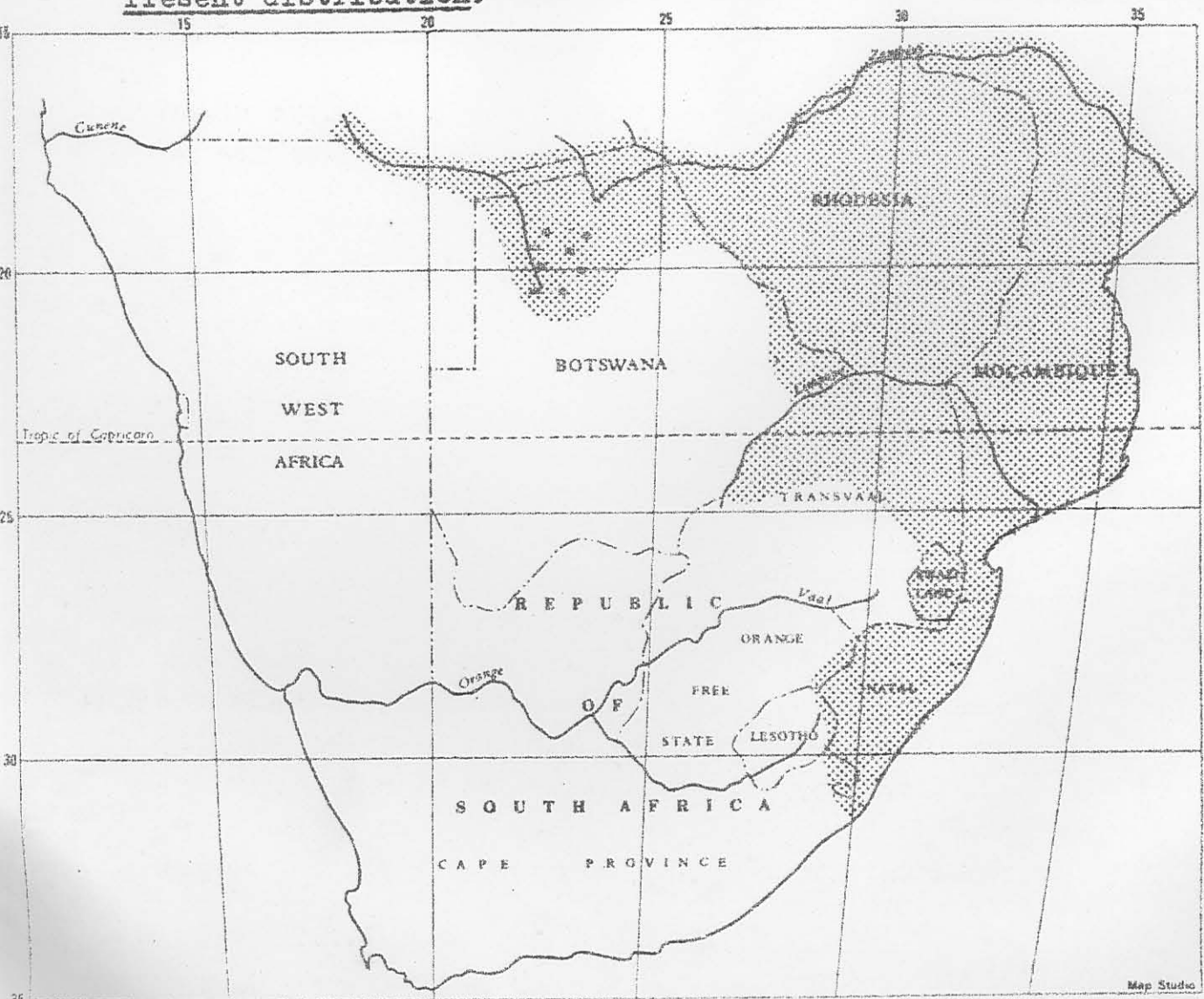


Past distribution:

Redunca arundinum (Reedbuck)

Present distribution:





Redunca arundinum (Reedbuck):

Cape Province:

It is possible that in the past the reedbuck had a wide distribution along most of the south and southeastern Cape in suitable habitat. It is recorded by Thunberg (1795) from the vicinity of Swellendam and by Backhouse (1844) from the vicinity of Caledon where he mentions several "Redunca Eleotragus". Other records more to the east include:

VC.104, Cape Archives: the Swartkops river (Uitenhage-Port Elizabeth divisions) and in the Zuureveld (present-day Grahamstown division) during the years 1796-8.

Sparrman (1789): Agter Brintjieshoogte in the present-day Pearston-Somerset East divisions.

Barrow (1801): the marshes of the Swartkops river; the vicinity of the Great Fish river; near the mouth of the Keiskamma river.

Lichtenstein (1827-35): the Langkloof area.

Moffat (Wallis, 1945): near the Mareetsane river in the northeastern Cape in 1829-30.

Smith (Kirby, 1940): the Molopo river near the present-day Mafeking in 1834.

Pringle (1835): Glen Lynden in the present-day Bedford division.

Cumming (1850): near the Molopo river.

Stanford (Macquarrie, 1962): a few in the Umzinthlanga valley near Kokstad, East Griqualand at the turn of the previous century.

Smith (Kirby, 1955): abundant near the coast between the Umzimvubu and Umsinkaba rivers in Pondoland in 1832.

"The South African News", 14th September, 1899: approximately 450 in the Komgha and Kimberley districts and a few in Griqualand East.

"The Cape Times", September 3rd, 1900: approximately 450 in the same areas as given by "The South African News" above.

File H 1, 1902-8, Cape Archives: from the annual reports of the Department of Agriculture reedbuck are principally reported from the divisions of Komgha and Kimberley, but sometimes also from other areas, such as Port Alfred and Bathurst whence a few were reported. The following figures give a fair idea of

the status of the reedbuck at that time. Komgha: 1902: 50; 1903 : 220; 1904 : 40-50; 1906 : 173; 1907 : 168 and 1908 : 186. Kimberley:(on the Vaal river islands) 1903 : 50; 1904 : 50; 1905 : 100; 1906 : 11; 1907 : 10 and 1908 : 100.

Natal:

Fynn (Stuart, 1950): Natal, no definite localities given, between the years 1824-36.

Champion (Booth, 1967): near the Umgeni river in 1835-9.

Angas (1849): the vicinity of the Umvoti river mouth.

Drummond (1875): very common in the reeds and marshes between the undulating ridges along the coast of Natal.

Brooks (1876): in the reeds of the water-courses of Natal.

Findlay (1903): along the Hluhluwe and Manzibomvu rivers; quite numerous in the foothills of the Magowie mountain.

Orange Free State and Lesotho:

Leyland (1866): the Free State side of the Vaal river.

Smith (Kirby, 1939): several in the vicinity of the Phutiatsiana river in 1834.

Transvaal:

Moffat (Wallis, 1945): the vicinity of Mosega (present-day Ottoshoop) in 1829-30.

Smith (Kirby, 1940): near the source of the Molopo river in the presentday Lichtenburg-Marico districts in the year 1834.

Trigardt (Le Roux, 1966): the vicinity of the Soutpansberg range in 1837.

Harris (1841): along the Similakate (= Elands) river and along the Crocodile river in the Rustenburg-Brits districts.

Cumming (1850): the Limpopo river on the northwestern Transvaal-Botswana border.

Selous (1881): along both the Marico and the Limpopo rivers.

Holub (1881): the highveld along the Mooi river between Potchefstroom and Krugersdorp.

Distant (1892): near Pretoria.



Bryden (1893): along the Crocodile river in northwestern Transvaal.

Van Oordt (1894): the old Pongola Game Reserve.

Rendall (1895): near the Lompangwana (?) river in eastern Transvaal.

Ward (1896): the tributaries of the Limpopo as well as the middle and lower courses of the Limpopo river itself.

Capell (1901-42): near the Komatie river in the Komatipoort vicinity in 1904; Steinmans Picket on the eastern bank of the Komatie river in 1905.

Stevenson-Hamilton (1911): the old Sabi and Shingwedzi Game Reserves.

Haagner (1920) and Shortridge (1934): northern and eastern Transvaal.

#### Swaziland:

Capell (1901-42): Embekelweni in 1903.

#### Mocambique:

Peters (1852): "A.isabellina" in the vicinity of Sena, Tete and Boror.

Sclater and Thomas (1894-5): eastern Mocambique.

Ward (1896): the country between Mashonaland (Rhodesia) and the east coast.

Bryden (1899): Gazaland and Mocambique.

Kirby (1899): the Cheringoma area; the Urema-Zangwe marsh; the vicinity of the Mwanza and Urema rivers.

Capell (1901-42): between the Sabie and Maticuana rivers in 1906.

Findlay (1903): the vicinity of the Urema river and in the Gorongosa area.

Selous (1908): the vicinity of the Pungwe river.

Vasse (1909): Gorongosa; Nioronga on the Pungwe river; Zumbo on the Zambezi.

#### Rhodesia:

The distribution of the reedbuck in Rhodesia was apparently a wide one in suitable environments along all the rivers. Few authors however mention the species.

Baines (1864): the Zambezi river in the

vicinity of Daka; near the Matetsi river.

Stabb (Tabler, 1967): near the Gwai river in 1875.

Holub (1881): near the Botswana border in the vicinity of Panda ma Tenka.

Selous (1881): along the Shashi, Ramaquabane and other tributaries of the Limpopo; along every river in Matabeleland and Mashonaland.

Holub (1890): between Panda ma Tenka in Botswana and the Victoria Falls.

Selous (1893): along the Umfule, the upper reaches of the Mazoe; near the Gwelo river in large numbers.

Oates (1899): the area between Panda ma Tenka and the Victoria Falls.

Selous (1907): the Jomani river; the angle between the Gwai and the Zambezi rivers.

Millais (1899): between the Nuanetsi and Buby rivers.

#### Botswana:

Smith (Kirby, 1940): along the Molopo river in 1834.

Cumming (1850): the Molopo river.

Bradshaw (1881): the vicinity of the Chobe river.

Selous (1881): near the Mababe, Tamalakane, Machabe, Sunta and Chobe rivers.

Anderson (1888): the Zouga river, Lake Ngami and the vicinity of the Makarikari pans.

Holub (1890): the junction of the Notwani and the Marico rivers; the confluence of the Chobe and Zambezi rivers.

Bryden (1893): along the Botletle, Chobe and Lotsani rivers.

Ward (1896): near the Lotsani river; the northern tributaries of the Limpopo; plentiful along the river systems of Ngamiland.

Schultz and Hammar (1897): the Chobe swamps; the Chobe river at Geluka.

Bryden (1899), Donat (1899), Selous (1907), FitzSimons (1920) and Shortridge (1934): the vicinity of the Chobe river and in Ngamiland.

Hodson (1912): along the Okavango and Mababe rivers.



### South West Africa:

Owing to the physical features of the country, the range of the reedbuck was limited to northern Ovamboland and the Caprivi Strip.

Andersson (undated manuscript): states that it did not occur in Damaraland or Great Namaqualand.

McKiernan (Serton, 1954): the junction of the Shoshongo and Okavango rivers in 1878.

Donat (1899): along one of the tributaries of the Okavango.

Capell (1901-42): large numbers in the eastern Caprivi in 1913.

FitzSimons (1920) and Shortridge (1934) northern Ovamboland, the Okavango valley and the Caprivi Strip.

### Present distribution:

#### Cape Province:

Skead (1953): refers to Hewitt (1931) who mentions approximately 70 reedbuck surviving in the entire Cape Province and between 46 and 60 in the Komgha division in 1952.

Skead (1958): the Uitenhage division.

Bigalke and Bateman (1962): East London and Komgha divisions.

De Graaff (in litt.): 4 reedbuck in the Bontebok National Park, 2 in the Mountain Zebra Park and 5 in the Addo Elephant National Park.

#### Natal:

Vincent (1962): states, "Ubiquitous throughout the Province and at all levels below 7,000 feet. Widely distributed but nowhere common."

Bigalke (1965): widespread in the Ixopo, Richmond, Camperdown, Pietermaritzburg, New Hanover, Lions River, Mooi River, Impendle, Underberg, Polela and Ubombo districts; more restricted in the Lower Tugela, Umvoti, Estcourt and Ngotshe districts; locally distributed in the Alfred, Umzinto, Mtunzini, Eshowe, Weenen and Paulpietersburg districts.

Benjamin (1966): rare in the Ndumu Game Reserve, the Sordwana Bay Nature Reserve and the Hluhluwe Game Reserve; fairly common in the Mkuzi Game Reserve and the St. Lucia Game Reserve and Park; common in the False Bay Nature Reserve, Giant's Castle Game Reserve, Loteni Nature Reserve and Coleford Nature Reserve.

Transvaal:

Kettlitz (1955): scarce, only north of the Marico river in the west and the Crocodile river in the east.

Kettlitz and Verschuur (1958): the Hans Merensky Nature Reserve.

Meester (1960): common in the Loskop Dam Nature Reserve.

Pienaar (1963): widely distributed throughout the Kruger National Park wherever suitable environmental conditions prevail, e.g. in the grassveld of the Pretorius Kop section, the grassland plains and depressions of the northern Lebombo flats, and the Mlondozi headwaters of the central district; estimates numbers at between 850 and 900, of which 350-400 occur south of the Sabie river and 200 in the central district.

De Graaff (in litt.): approximately 1800 in the Kruger National Park in 1969.

Orange Free State:

Gilfillan (1966): records four reedbuck from the Golden Gate Highlands National Park.

De Graaff (in litt.): 5 in the Golden Gate National Park in 1969.

Mocambique:

Fajardo (1953): the Gorongosa National Park.

Ellerman et al. (1953): the Inhambane, Beira and Gorongosa districts.

Ansell (1967): common in the Rio Save area.

Rhodesia:

Fraser (1958): more plentiful in Mashonaland than in Matabeleland; fairly large numbers along the Zambezi river to the west of the Victoria Falls.

Child and Savory (1964): widespread throughout Rhodesia but apparently absent from the Limpopo and the Zambezi valleys.

Botswana:

Hill (1942): along the Kwaai river and on the Mababe Flats in Ngamiland.

Kay (1962): along the Kwaai river and on the Mababe Flats.

Kirsten (1966): the Moremi Game Reserve.

Tinley (1966): the Moremi Game Reserve.

Child (1968): not common in the Chobe Game Reserve, although numbers are higher in the Kachikau



Enclave; well represented around the Okavango swamps and around Panda ma Tenga; more plentiful on the Savuti swamp; shot in increasing numbers on the Maun tsetse Front.

Smithers (1968): occurs in the extreme northwest of Botswana on the South West Africa border; in the Okavango delta south to Tsau in the west, Maun in the east, the Mababe Depression, the Chobe river area and southwards along the Rhodesian border to Nata and the Tati Concession.

South West Africa:

Bigalke (1958): abundant in the vicinity of the Okavango river and the Caprivi; probably extends into the eastern part of Ovamboland and occasionally as far west as the western Cunene.

Change in distribution:

The reedbuck has disappeared from a large part of the Cape Province. Skead (1958) writes: "In the past the reedbuck was widely distributed throughout the south-eastern Cape but today it inhabits about a quarter of a single magisterial district." He is alluding to Komgha which, excepting for a few probably occurring in the East London division, is the last stronghold of the reedbuck in the entire Cape.

It has also probably disappeared from the Transkei, Pondoland, East Griqualand as well as from the Cape Province north of the Orange river.

In the northwestern Transvaal it is only to be found to the north of the Marico river and in the eastern Transvaal to the north of the Crocodile river. This implies its disappearance from the vicinity of the Vaal and other highveld rivers as well as from the western and most of the northwestern Transvaal where it was recorded for the first time.

In Rhodesia, Mocambique and South West Africa, the overall area of distribution is more or less the same as in the past.

It has disappeared from southern Botswana as well as from the lower eastern Botswana-Transvaal border and only occurs in northern and northeastern Botswana in its old range limits.

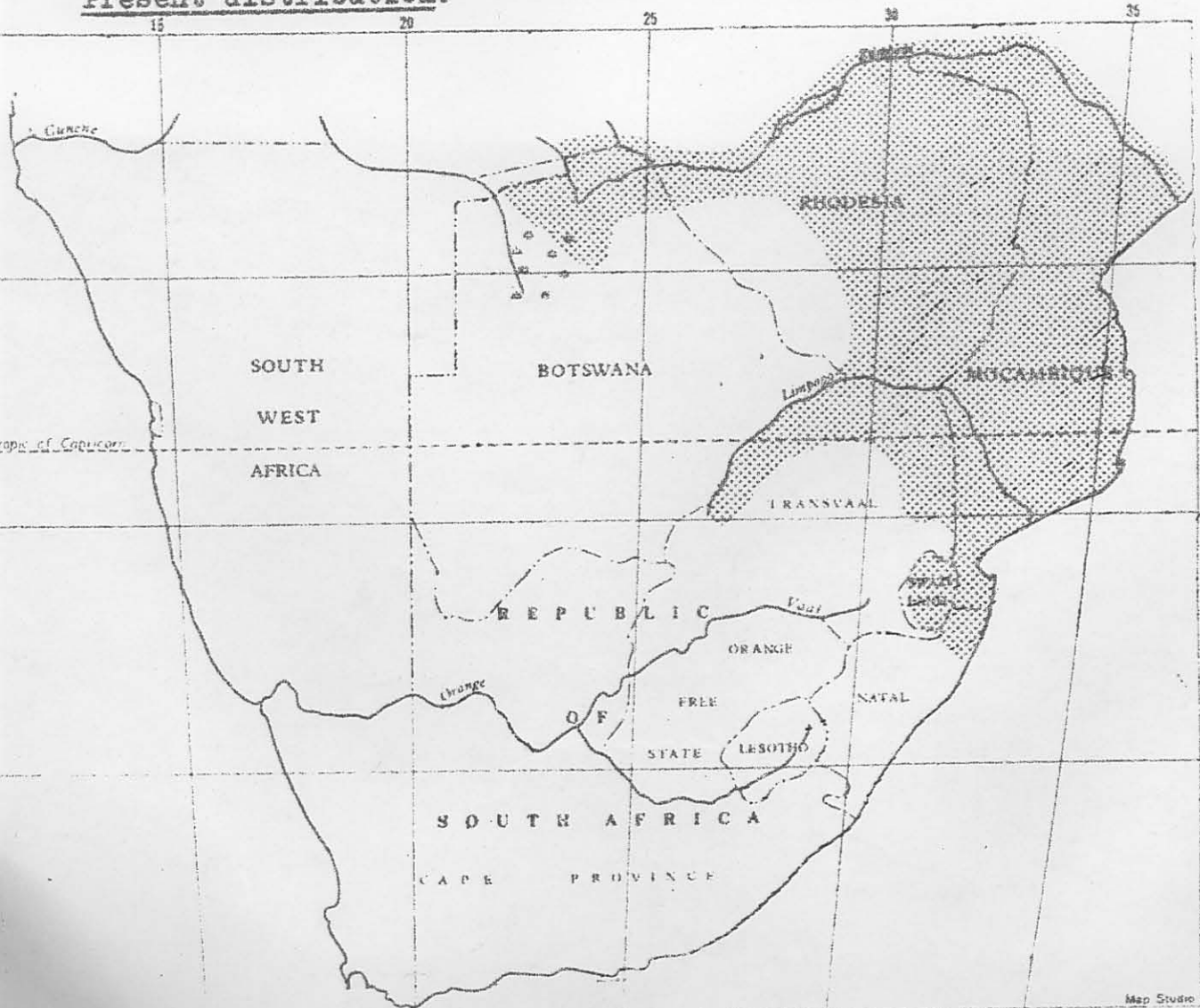




Past distribution:

Kobus ellipsiprymnus (Waterbuck)

Present distribution:





Kobus ellipsiprymnus (Waterbuck):

Meester et al. (1964) regard K.defassa as conspecific with K.ellipsiprymnus. Since very few hunters or travellers have mentioned two separate species in the past, this more realistic view will be followed. The following records could be found:

Natal:

Drummond (1875): very common along the Umsundusi river in Zululand as well as on the Pongola river.

Buckley (1876) and Brooks (1876): Zululand.

Baldwin (1894): along the St. Lucia river, near St. Lucia Bay and along the Mkuze river.

Ritter (1955): large numbers killed during the great hunt of Shaka at the confluence of the White and Black Umfolozi rivers in August 1819.

Transvaal:

Smith (1836 and 1849): only found north of Kurrichane (= the present-day town of Marico) along the banks of perennial rivers.

Smith (Kirby, 1955), Harris (1841), Methuen (1848): first encountered along the Marico river in northwestern Transvaal in considerable numbers.

Smith (Kirby, 1940): along the rivers in the vicinity of the Cashan (= Magaliesberg) range, especially the Crocodile, in 1835.

Harris (1841): along the Crocodile and Marico rivers in northwestern Transvaal.

Cumming (1850): large herds along the Notwani and the upper reaches of the Limpopo river.

Elton (1873): in the vicinity of the junction of the Shashi and the Limpopo; in the Tolo Azime valley; in great numbers between the junctions of the Nuanetsi and Olifants rivers with the Limpopo.

Stabb (Tabler, 1967): at the junction of the Marico and Crocodile rivers.

Glynn (1926): near White River, Logogot Kop and Sabie in the eastern Transvaal in the years subsequent to 1873.

Holub (1881): along the Marico river and in the vicinity of the Limpopo river in 1875.

Holub (1890): near the junction of the Matlabas and the Notwani with the Limpopo.



Millais (1899): along the Limpopo river in northern Transvaal.

Van Oordt (1894 -5): in the old Pongola Game Reserve.

Mocambique:

Peters (1852): near Sena, Tete, Quelimane and Boror.

Kirby (1899): the Urema-Zangwe marsh; along the Mwanza, a tributary of the Urema; along the Urema; on the Urema plains in large numbers.

Kirk (1864): very common on the coast at the mouth of the Zambezi.

Livingstone (1865) and Livingstone (Schapera, 1963): abounding along the Zambezi river.

Peters (1902): mainly between the Save and the Zambezi rivers.

Findlay (1903): along the Pungwe, Urema, Sabassa, Massarara, Jungwe and Madingue-dingue rivers; in the area between the Mwanza and Mwardzi rivers in the Cheringoma and Gorongosa districts.

Selous (1908): the Pungwe river vicinity.

Vasse (1909): along the Mavuzi, a branch of the Pungwe; near Guengeré on the Pungwe river; near Chicolé, Ganda and Nioronga on the Pungwe' river; near Zumbo on the Zambezi.

Rhodesia:

Baines (1864): in the vicinity of the Matetsi river and near the Victoria Falls.

Stabb (Tabler, 1967): along the Ramaquabane, Bembesi and Gwai rivers.

Holub (1881): along the Zambezi river.

Holub (1890): near the Matetsi river and in the vicinity of the Victoria Falls.

Selous (1881): plentiful on the Shashi and the Ramaquabane, as well as along the Zambezi and its tributaries.

Selous (1893): along the Kadzi, Umfule, Umgezi, Gwelo and Zambezi rivers.

Ward (1896): the upper Zambezi and its tributaries.

Oates (1899): along the Umgwanya and Ramaquabane as well as at the junction of the Gwailo and the Umgwanya rivers.

Selous (1907): in the vicinity of the Jomani, Gwai, Umniati, Umfule and Umzweswe rivers; at the confluence of the Umniati and the Umfule rivers; the Victoria Falls.

Chubb (1909): Mangwe and Sinonombi in Matabeleland.

Botswana:

Cumming (1850): along the Notwani river and along the left bank of the Limpopo.

Baines (1864): in the Panda ma Tenka area near the Rhodesian border.

Stabb (Tabler, 1967): along the Notwani river; along the Limpopo near the present-day Pala Camp; along the Ramaquabane river.

Bradshaw (1881): along the Chobe river.

Schultz and Hammar (1897): the Chobe river.

Selous (1881): along the Chobe, Sunta and Tati rivers.

Bryden (1893): the vicinities of the Chobe, Botletle and Okavango rivers.

Bryden (1899): as far south as the Notwani and Marico rivers in the past.

Hodson (1912): between Gat-garra and the Chobe, as well as along the latter.

South West Africa:

Andersson (unpublished manuscript): the waterbuck did not occur in Great Namaqualand, Damara-land or Ovamboland; only found along the Cunene river in the north.

Green (Petermann, 1867): along the Cunene.

Ward (1896): the Caprivi.

General:

The following authors, in reviews of the distribution of the waterbuck, all give approximately the same overall distribution: Bryden (1899), Lydekker (1908), Haagner (1920), FitzSimons (1920) and Shortridge (1934). They mention its occurrence along the Notwani and Marico rivers in earlier times, and from there northwards and eastwards along the Crocodile and Limpopo rivers as well as along other rivers in northern and eastern Transvaal, Zululand, Swaziland, Mocambique, Rhodesia, northern Botswana and the Caprivi. Of the above



Bryden (1899) states that the waterbuck had apparently never been heard of on the Orange, seldom if ever on the Vaal and never in the Cape Province south of the Orange river.

Kobus defassa as such, is mentioned by Bryden (1899) along the Cunene river, by Sclater (1900) in northern South West Africa and along the Chobe, Kwando and Maschi rivers and also along the upper Zambezi in the Caprivi. Shortridge (1934) records it from the upper Okavango and the eastern Caprivi.

Present distribution:

Natal:

Vincent (1962): the Hluhluwe and Umfolozi Game Reserves.

Bourquin (1966): estimated numbers in the Hluhluwe Reserve, 200 and in the Umfolozi Game Reserve, 2,500 (1965 census).

Transvaal:

Knobel (1958): fairly well represented in the Kruger National Park and private reserves.

Kettlitz (1955 and 1962): outside the Kruger National Park fairly rare in the Marico, Rustenburg, Waterberg, Potgietersrust and Pietersburg districts; on a few farms in the western Soutpansberg district, with the highest density at the junction of the Limpopo and Shashi rivers; the Letaba, Pilgrims Rest and Barberton districts, with the latter district forming its southern limit of distribution; except at the Loskop Dam Nature Reserve, no waterbuck occur in the southern or central Transvaal; estimated number in the Transvaal outside the Kruger National Park, not less than 2,000.

Pienaar (1963): woodlands near permanent water throughout the Kruger National Park, with estimated numbers between 3,000 and 3,500.

Mocambique:

Fajardo (1953): common in the Gorongosa National Park.

Ellerman et al. (1953): "Portuguese East Africa", specifically mentioning Gorongosa district.

Ansell (1967): along the Save river.

Rhodesia:

Fraser (1958): plentiful in the lowveld areas, particularly along the Zambezi.

Child and Savory (1964): absent over a large part of the western half of the territory, except in the Limpopo and Zambezi valleys.

Botswana:

Kay (1962): herds near the pans on the Mababe Flats and along the Kwaai river in northern Botswana.

Kirsten (1966): the Moremi Game Reserve.

Knobel (1967): the Chobe Game Reserve.

Palmer (1967): the Chobe Game Reserve.

Tinley (1966): common in small herds on the Kwaai Flood Plain, Moremi Wildlife Reserve.

Child (1968): northeastern Botswana in the vicinity of the Chobe river; along the Savuti and Linyanti; Tsotsoroga Pan; Ngwezumba pools; Kwikampa pan; the Panda ma Tenga area; the Moremi Game Reserve; scarce around the southern and western fringes of the Okavango swamp.

Smithers (1968): the swamp fringes and rivers in the southern and eastern parts of the Okavango delta; along the Chobe river southwards to pan areas in the central part of the Chobe Game Reserve; Tamafupi on the Rhodesian border; the southern part of the Tati Concession; the extreme east of the Bamangwato Reserve in the northern Tuli Block farms.

Winchester-Gould (1968): the thick riverine vegetation of the Chobe and Okavango regions.

South West Africa:

Bigalke (1958): limited to the Caprivi Strip, east of the Kwando river.

Swaziland:

Kirk (1966): the Mlilwane Sanctuary.

Change in distribution:

The waterbuck has disappeared from a large part of northwestern Transvaal. In the past it was to be found along all the rivers in this part of the Transvaal as far as the present-day Brits district, but at present is practically confined to the lower waters



of the Marico and Crocodile rivers near their junction and along the Limpopo. In northern and eastern Transvaal its distribution no doubt has also been curtailed owing to pumping and farming activities along most of the rivers in those districts. Where, in former times, it would have occurred along all the rivers in the lowveld, its range is limited at present to the rivers mentioned above.

In Botswana it probably does not occur along the Notwani or upper Marico rivers any more. Roberts (1951), mentions the type locality of the waterbuck as the Molopo river, but it has been long since extinct in this area.

If the waterbuck did occur along the Vaal river in the past as stated by Bryden (1899), its distribution in the southern Transvaal has also ceased.



Past distribution:

Kobus vardonii (Puku)

Present distribution:





Kobus vardoni (Puku):

The range of the puku is, and always has been, a very localised one, being limited to the northwestern corner of Rhodesia and the vicinity of the Chobe-Zambezi junction in the extreme northeastern Botswana.

Kirk (1864) mentions the puku as being common in the marshes about the Chobe and the Zambezi near their confluence.

Holub (1881) saw the puku for the first time in large numbers at the junction of the Chobe and Zambezi rivers, and also mentions having seen them at Sesheke on the Zambezi, ie. in the present-day Caprivi.

Bradshaw (1881) records the puku from the Chobe river.

Selous (1881) states that the puku was found only along the south bank of the Chobe river for a distance of about 60 miles westwards from the confluence of the Chobe and the Zambezi, but occasionally occurring to the east along the south bank of the Zambezi up to the Victoria Falls.

Holub (1890) again records it from the junction of the Chobe and the Zambezi and along both rivers in this vicinity.

Bryden (1893) writes that the puku was an extremely local antelope encountered along the upper Zambezi from Sesheke to the Barotse valley and along the southern bank of the Chobe.

According to Schultz and Hammar (1897) the puku occurred in the Chobe swamps.

Bryden (1899) includes a chapter written by Selous who states that the puku was very common in the vicinity of the Chobe-Zambezi confluence and along the Chobe in 1874, herds of 50 not being rare. By 1877 they were becoming scarce owing to the native wars of 1876 when fleeing natives took refuge on the south bank of the Chobe and killing large number of puku for food. Selous credits Livingstone with having discovered the puku near Libonta along the upper Zambezi in November 1853.

Sclater (1900) mentions it from the upper part of the Zambezi valley, especially along the Chobe river.

Selous(1907) records a few puku from the vicinity of the Victoria Falls in 1874, but states that according to the natives they were common higher up along the Zambezi and along the south bank of the Chobe at that time. He encountered herds of puku near the confluence of the Chobe and Zambezi, especially on a flat of 6 to 8 miles in length which he named the 'Pookoo-Flats'.

Lydekker (1908) records it from the Chobe and Zambezi valleys (Barotseland) and Rhodesia.

Hodson (1912) records it from the Chobe river, and Haagner (1920), as well as the Zambezi and Chobe, also mentions the Kafue river.

The Zambezi and its tributaries constitute the range given by FitzSimons (1920). Shortridge (1934) gives a small strip of country from the confluence of the Chobe and Zambezi westwards for about 60-70 miles along the south bank of the Chobe, and eastwards along the Zambezi as far as the Victoria Falls.

#### Present distribution:

According to Hill (1942), the Vernay-Lang Kalahari expedition encountered puku at Kabulabula and on Legge's Island in the Chobe river.

Child and Savory (1964), quoting Ellerman et al.(1953) as recording the puku from the neighbourhood of the Victoria Falls and the junction of the Chobe and Zambezi rivers, state that it is not altogether clear whether or not puku had ever been confirmed in Rhodesia. No puku have been reported in recent years.

Knobel (1967) records the puku from along the Chobe river in the Chobe Game Reserve, northern Botswana.

Child (1968) records a small relic population along the Chobe and on the Pookoo flats near Serondela. He estimates the entire puku population in Botswana as less than 100 individuals.

According to Smithers (1968) the puku is confined to the extreme northeast in the Linyanti and Chobe river swamps from Linyanti to the Kasane area.

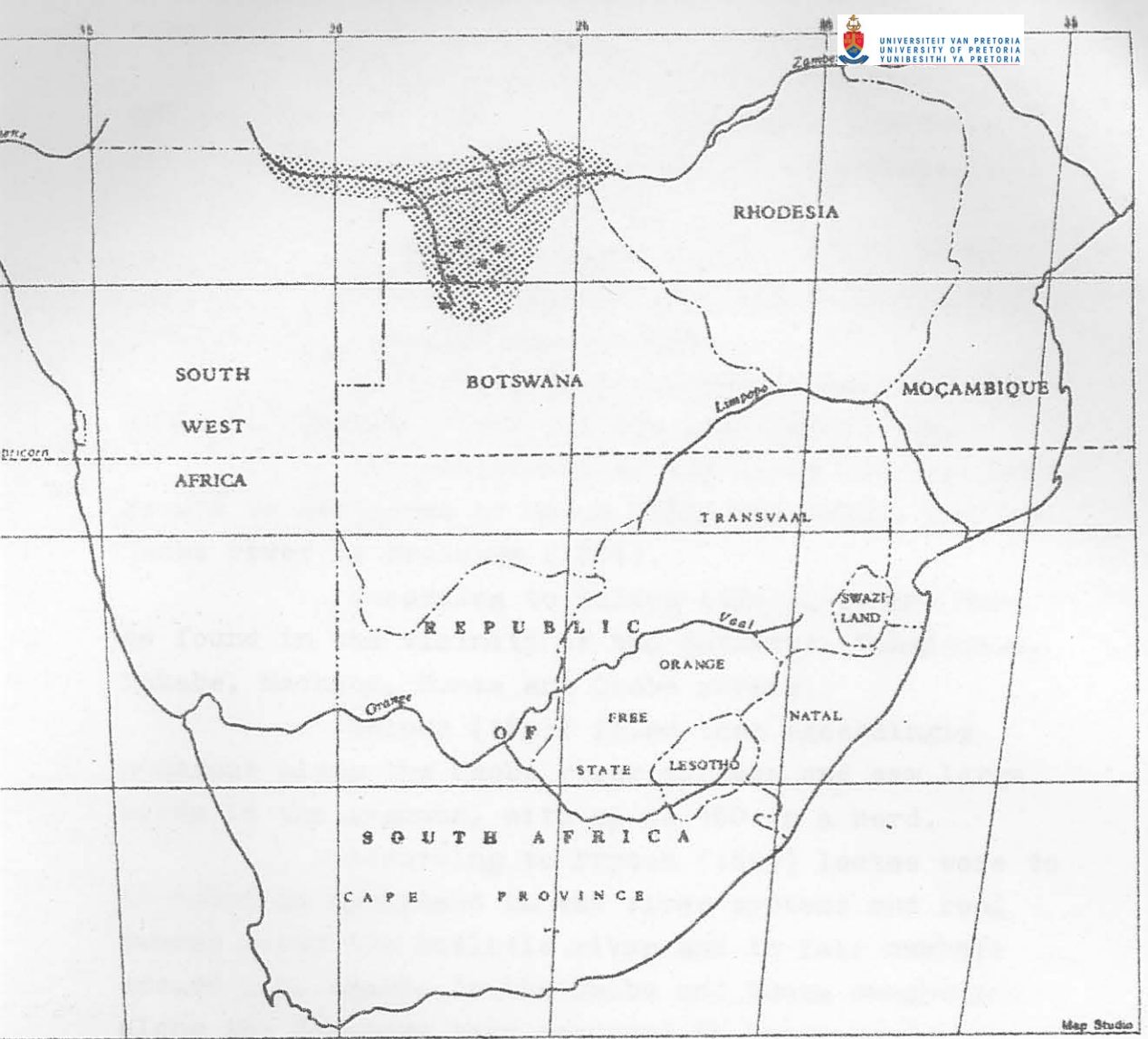
#### Change in distribution:

Local changes in the range of the puku have taken place. Child (1968) states that the puku population on the Chobe and Pookoo flats represent the southern limit of a bulge in the species range across

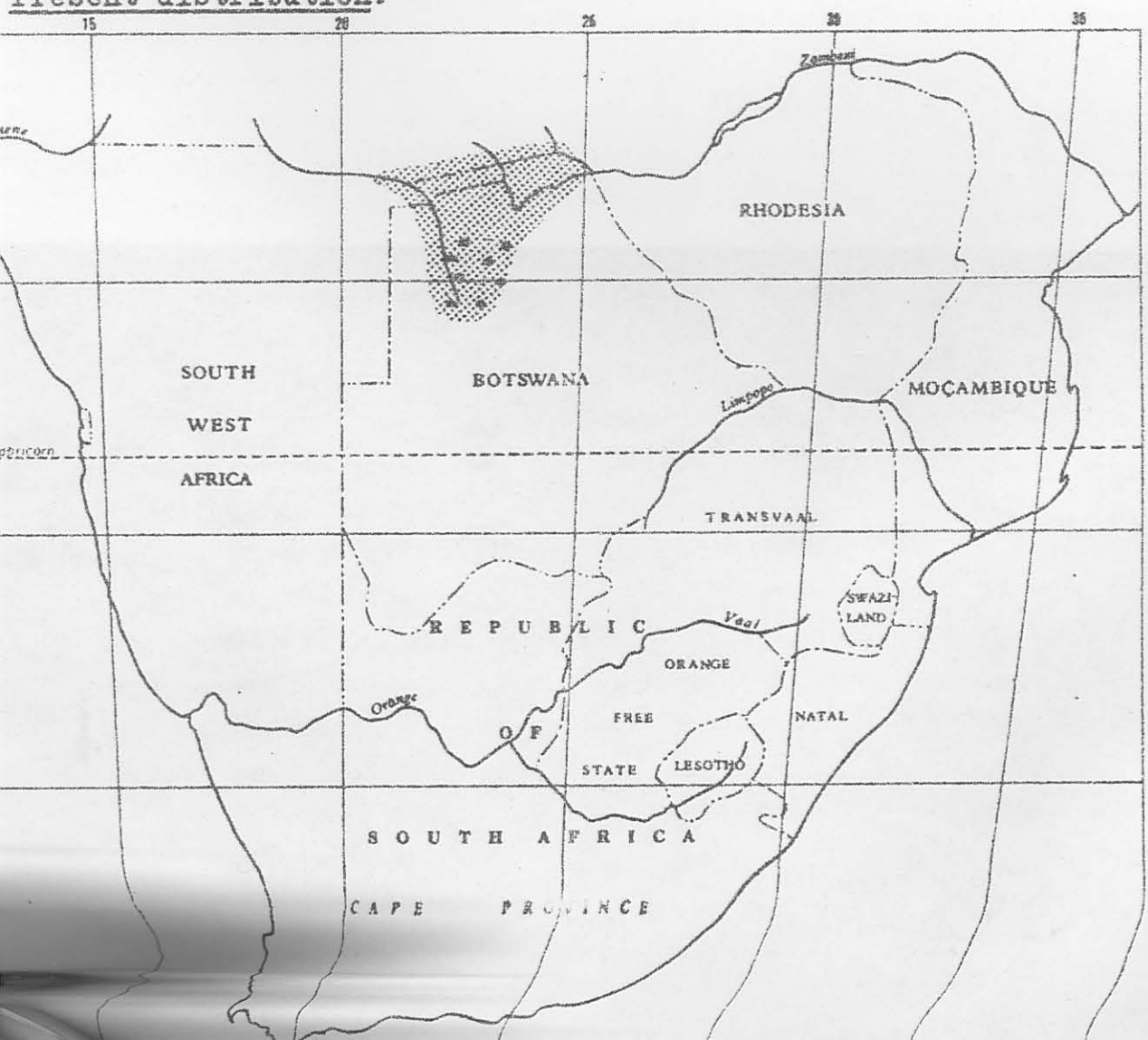


the Caprivi. The species has disappeared however, from the north bank of the Chobe within the last 40 years. It does not occur on Imparira island, at the eastern tip of the Caprivi, where fairly large numbers were reported in 1947. According to Child and Savory (1964) it is extinct in Rhodesia.

Numbers have obviously declined since the time that Selous encountered large numbers on the Pookoo flats in 1874.



Past distribution:  
Present distribution: Kobus leche (Lechwe)





Kobus leche (Lechwe):

The earliest records of the lechwe are from Lake Ngami. Andersson (1856) and Livingstone (1857), who visited the Lake in 1850 and 1849 respectively, encountered hundreds in the shallows of this lake. Livingstone again records lechwe in 1852 from the Chobe marshes. He also mentions extremely large numbers from Linyanti to Sesheke, ie. in the present-day Caprivi.

Petermann (1858) gives an account of Wahlberg meeting lechwe along the Zouga (= Botletle) river.

Kirk (1864) writes as follows: "This antelope has not been found near either coast in the line of the Zambezi; it is limited to the central valley above the Victoria Falls, to the marsh-banks of that river and its tributaries, especially the Chobe."

Buckley (1876) in giving the past range of this species, says: "To the west this species does not apparently advance beyond 26° 30' longitude; probable southern limit latitude 21°."

McKiernan (Serton, 1954) on his third journey of trade to Lake Ngami in 1877-8, encountered lechwe along the Tamalakane river.

Anderson (1888) records lechwe from the Zouga (=Botletle) river and the Lake Ngami area.

The confluence of the Chobe and the Zambezi rivers is mentioned by Holub (1881 and 1890), and the Chobe river by Bradshaw (1881).

According to Selous (1881), lechwe were to be found in the vicinity of the Botletle, Tamalakane, Mababe, Machabe, Sunta and Chobe rivers.

Selous (1893) found them exceedingly numerous along the Chobe river marshes and saw large herds in the lagoons, with up to 100 in a herd.

According to Bryden (1893) lechwe were to be found in Ngamiland in the river systems and reed swamps along the Botletle river and in fair numbers around Lake Ngami. In the Chobe and Sunta swamps and along the Okavango they occurred in large herds.

Baldwin (1894) reports them along the Botletle to Lake Ngami and along the Zouga river.

The following authors give more or less the same area, ie. southwestwards from the Zambezi to Lake Ngami in the marshes of the Chobe and Botletle and the grassland near rivers overflowed by the waters of the Tamalakane, Mababe, Machabe, Sunta and Okavango: Sclater and Thomas (1894-5); Ward (1896); Schultz and Hammar (1897); Bryden (1899); Sclater (1900); Selous (1907) and Selous (1908).

Hodson (1912) records lechwe from near the Okavango river and between Gat-garra and the Chobe, as well as along the Mababe river.

Capell (1901-41) encountered very large herds in the Caprivi in 1913.

Both Haagner (1920) and FitzSimons (1920) record the lechwe from Lake Ngami and northwards along the upper Zambezi, its tributaries and swamps.

According to Shortridge (1934) it occurred in the following areas: the Okavango valley west of the Omarumba Omatako; along the south bank of the upper Okavango between Kuring-kuru, Sambio and Mbunja; along the lower Okavango from Mohango Drift southwards to Ngamiland; in Ngamiland from the Okavango delta and lower Botletle northwards across the Zambezi.

#### Present distribution:

The following records refer to its present distribution:

Hill (1942): the Kwaai river vicinity (Okavango delta).

Roberts (1951): the swamps of the upper Zambezi and lower Okavango, but very local in habitat.

Meester et al. (1964): the Caprivi Strip, the Okavango valley and northern South West Africa.

Kay (1962): very large numbers in the Boro river and Okavango river swamps; the Mababe flats and the Kwaai river vicinity.

Kirsten (1966): the Moremi Game Reserve.

Tinley (1966): extremely abundant on the Kwaai and Mogogelo Flood Plains.

Knobel (1967): along the Chobe river in the Chobe Game Reserve.

Child (1968): distinguishes between two distinct populations, ie. one occurring along the Linyanti-Chobe system and the other in the Okavango



swamps; occur along the Linyanti and along the Savuti when there is water present in the channel; the Caprivi Strip.

Smithers (1968): throughout the Okavango delta as far south as between Gomare and Nokaneng in the west and just north of Maun in the east; may penetrate to the Savuti swamp in high flood years; common in the Chobe river area from the Linyanti swamp to the eastern tip of the Caprivi Strip opposite Kasane.

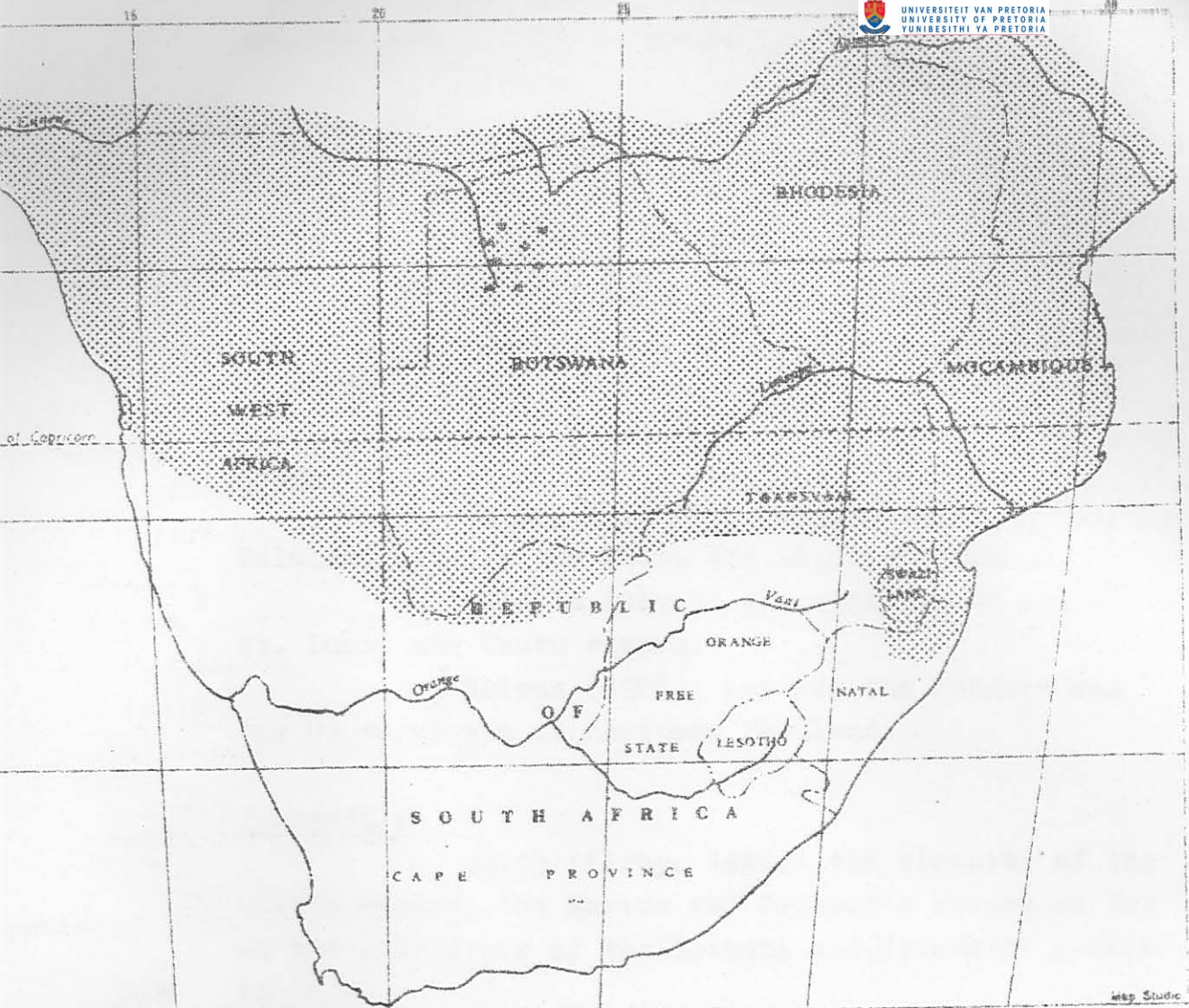
Child et al. (in press): the Maun Front Tsetse Control Hunting Area; the limit of the species' effective range about 30 to 40 miles from Toten in the direction of the Okavango swamp along the Boro river.

Child and Von Richter (in press): along the Chobe river in the Chobe National Park; numbers declining from 2,500 in 1962 to 778 in 1966 on the flood plain along parts of the count route.

Change in distribution:

Occurs in more or less the same area as in the past but with diminished local ranges and encountered in smaller numbers at fewer localities. Child and Von Richter (in press) state that the species' effective range has decreased west of the Chobe National Park, as it has virtually disappeared from the Lake Liambezi area where Selous (1893) remarks on its abundance.





Past distribution:

Aepyceros melampus (Impala)

Present distribution:





Aepyceros melampus (Impala):

Cape Province:

Barrow (1806) records the impala from near Litakun (between Kuruman and Vryburg) in the northern Cape Province. Daniell (1812) who accompanied Truter and Somerville, gives a description and mentions its occurrence in the "Boosh-wanna district" (= present-day northern Cape). Lichtenstein (1812), likewise records the impala from the Koossi valley in what was then southern Bechuanaland. (According to Ellerman *et al.*, 1953, Koossi is the present-day Kosis, east of Olifantshoek, and south of Kuruman, northern Cape.)

Further northern Cape records include:

Thompson (1823): near Kuruman Fountain on the Kuruman river.

Burchell (1824): near the Kuruman river and from the vicinity of Litakun.

Campbell (1822): the Old Lattakoo (= Litakun) and the Mashowing river vicinities.

Smith (Kirby, 1940): near Kuruman in 1835.

Cumming (1850): the banks of the Mareetsane river.

Leyland (1866): Griqualand West.

Bryden (1936): the impala never occurred south of the Orange river.

Natal:

Drummond (1875): large numbers in northern Zululand between the Usutu and Msunduzi rivers.

Baldwin (1894): the vicinity of the Mkuzi, St. Lucia and Usutu rivers.

Selous (1908): between the Pongola and the Usutu rivers in northern Zululand.

Transvaal:

Smith (Kirby, 1940): the vicinity of the Little Marico, the Marico and Crocodile rivers as far as the confluence of the Notwani and Crocodile rivers in 1834.

Trigardt (Le Roux, 1966): the Soutpansberg district in 1836-7.

Harris (1841): near the source of the Marico river and in the vicinity of the Crocodile river in the

present-day Rustenburg and Brits districts.

Mauch (Petermann, 1870): along the Olifants river in eastern Transvaal.

Stabb (Tabler, 1967): near Zeerust; at the junction of the Crocodile and Marico rivers in 1875.

Holub (1881): along the Marico river.

Oates (1889): along the Crocodile river near the present-day Thabazimbi.

Hofmeyr (1890): both impala and springbok on the present-day Springbok Flats in the Potgietersrus district.

Van Oordt (1894-5): the old Pongola Game Reserve.

Rendall (1895): between the Sabie and the Crocodile rivers in the eastern Transvaal.

Millais (1899): near the Olifants river in the central Transvaal; near the confluence of the Olifants and Elands rivers in the present-day Marble Hall district; near Magato in the Soutpansberg range; Mara in the vicinity of the Soutpansberg and also to the north of this range.

Stevenson-Hamilton (1911): the Sabie and Shingwedzi Game Reserves.

Stevenson-Hamilton (1929): the Transvaal lowveld.

#### Mocambique:

Peters (1852): Tete, Chindima and Sena.

Livingstone (Schapera, 1963): the vicinity of the Zambezi river in 1853.

Drummond (1875): near the Incomati river.

Erskine (1875): along the Zavora river near the coast.

Erskine (1869): the southern parts of Mocambique.

Elton (1873): the area between the junction of the Nuanetsi and the Limpopo and the junction of the Olifants and the Limpopo.

Kirby (1899): the Gorongosa area; near the Mwanza river (a tributary of the Urema); the Chiringoma forest.

Findlay (1903): the Gorongosa area; the vicinity of the Mwardzi (a tributary of the Urema) as well as the Urema vicinity itself.

Vasse (1909): Guengere on the Pungwe river.



Rhodesia:

Livingstone (Schapera, 1963): the vicinity of the Zambezi in the 1850's.

Kirk (1864): near the confluence of the Chobe and Zambezi rivers.

Livingstone (1865): along the Zambezi river.

Stabb (Tabler, 1967): near the Bembesi and Gwai rivers; near the Victoria Falls in 1875.

Holub (1881): the confluence of the Chobe and Zambezi; the Victoria Falls.

Oates (1889): the confluence of the Gwailo and Umgwanyana rivers; near the Ramaquabane and Matengwe rivers; north of Panda ma Tenga.

Holub (1890): the Victoria Falls.

Selous (1893): near the Kadzi, Umsengaisi, Panyami and Zambezi rivers.

Millais (1899): near the Nuanetsi river.

Selous (1907): near the Jomani river; at the confluence of the Gwai and Zambezi rivers; the Dett neighbourhood; along the Zambezi; between the Umsweswe and Umfule rivers.

Botswana:

Moffat (Wallis, 1945): between the Mhalapshwe and Shashi rivers and also near the Ramaquabane river in 1829.

Methuen (1846): west of the Notwani river in the Molepolole vicinity; along the Marico river.

Cumming (1850): eastern Botswana along the Notwani and Limpopo rivers; between Lephepe and Boatlaname north of Molepolole.

Livingstone (1857): near Kolobeng and at the Boatlaname wells.

Leyland (1866): the Kolobeng vicinity; near Mabotsa in the vicinity of the Bakatla mountain; near the Zouga river in the Lake Ngami area.

Stabb (Tabler, 1967): along the Notwani and Limpopo rivers in 1875.

McKiernan (Serton, 1954): along the Tamalakanane river near Lake Ngami in 1877.

Baines (1877): along the Maclautsi and Limpopo rivers in northeastern Botswana.

Selous (1881): along the Marico and Notwani rivers; along the banks of each river, stream or permanent vlei, eg. from Boatlaname and Selinya north of Molepolole.

Holub (1881): the confluence of the Mhalapshwe and Limpopo rivers; Tobane on the Maclautsi river; the left bank of the Marico river.

Anderson (1888): north of Molepolole near Selene Pan; Ngamiland; the Makarikari pans; the vicinity of the Kwando and Chobe rivers.

Oates (1889): near the Shashi and Ramaquabane rivers.

Holub (1890): along the Limpopo in eastern Botswana; near Panda ma Tenga; the junction of the Chobe and Zambezi rivers.

Bryden (1893): in earlier times from southern Botswana to the Zambezi; at the time of writing only from Pala Camp along the Limpopo northwards; occurred to the interior where bush and water were to be found.

Baldwin (1894): Kolobeng; Sechele's Kraal (Molepolole); Lephepe and the Boatlaname fountains.

Schultz and Hammar (1897): the junction of the Chobe and Zambezi rivers.

Selous (1907): the vicinity of the Botletle river.

Hodson (1912): the area between Gat-garra and the Chobe; Matomabi, 24 miles from Metsibothloko; the northeastern edge of the Mababe flats; the Mababe river and the vicinity of the Chobe river.

#### South West Africa:

Andersson (Wallis, 1936): to the southwest, between the Olifants and Nossob rivers in the 1850's.

Andersson (1856): near Schmelens Hope; the Omanbonde Pan; along the Black Nossob.

Livingstone (1857): in what is now known as the Caprivi Strip, but described by him as the area north of the Chobe swamps.

Petermann (1858): the Walvis Bay area.

Baines (1864): the Nossob river valley towards the Olifants river; near the Okavango river.

Andersson (1861): along the Omarumba Omatako near Omborombonga; near Omanbonde.

Bradshaw (1881): the Chobe river area.



Anderson (1888): Wesley Vale on the Nossob.

Selous (1893): along the Chobe river.

Shortridge (1934): the Okavango valley in the Grootfontein district; the central and eastern Caprivi.

General:

The following are more comprehensive surveys of the distribution of the impala:

Buckley (1873): Zululand and further north; common along the Limpopo.

Sclater and Thomas (1894-5): from Botswana northwards in southern and eastern Africa.

Ward (1896): the wooded parts of northern Transvaal, Khama's country (= Botswana) and further north to the Zambezi and Chobe rivers.

Bryden (1899, quoting Kirby): in earlier times throughout the wooded parts of Botswana and the Transvaal and northwards to the Zambezi; also in eastern Transvaal, Mocambique and eastern Mashonaland.

Sclater (1900): extinct in the Kuruman area but still present in Zululand, Mocambique, the northern and eastern Transvaal lowveld and Rhodesia.

Lydekker (1908): along the eastern side of Africa.

Haagner (1920): from Zululand through eastern Transvaal, Mocambique and Rhodesia.

FitzSimons (1920): in the past as far south as Kuruman, but extinct there; still occurring along the Limpopo and its tributaries; Zululand; eastern Transvaal; Mocambique and Rhodesia.

Shortridge (1934): Zululand, Mocambique, the lowveld of eastern and northern Transvaal, Rhodesia and northern Botswana (Ngamiland).

Present distribution:

Cape Province:

According to Bigalke and Bateman (1962), impala occur outside their original range only in the Cape. They have been introduced on a few farms in the Kimberley, Herbert and Philipstown divisions.

Natal:

Vincent (1962) reports that the impala is fairly widely distributed in Zululand in the acacia thornveld north of the Umfolozi river. He also records impala from the Umfolozi and Hluhluwe Game Reserves as well as from the adjacent hills up to the Ubombo and Ngotshe districts. Re-introductions have been made into the St. Lucia and Ndumo areas and into a large number of privately owned thornveld farms.

Bigalke (1965) gives its distribution in Natal as follows: widespread in the Ubombo district; restricted in the Ngotshe and Mtunzini districts; locally distributed in the Lower Tugela, Umzinto, Ixopo, Richmond, Camperdown, Pietermaritzburg, Lions River, Umvoti, Estcourt, Bergville, Kliprivier, Dundee and Vryheid districts. The above list does not consider the Natal Game Reserves and Parks, but Bourquin (1966) reports as follows for these areas: very common in the Ndumu Game Reserve, Mkuzi Game Reserve and the False Bay Nature Reserve, with 400 occurring in the latter in 1965; very common in the Hluhluwe Game Reserve with approximately 5,000 in 1965; common in the Umfolozi Game Reserve but rare in the Stainbank Nature Reserve.

Orange Free State:

Impala have been introduced into the Willem Pretorius Game Reserve (Roberts, 1963).

Transvaal:

Transvaal records include those of:

Van der Merwe (1955): approximately 59 in the S.A.Lombard Nature Reserve.

Kettlitz (1955 and 1962): outside of the Kruger National Park impala occur to the north of the Marico river in northwestern Transvaal along the entire western and northern boundaries of the province, southwards along the western boundary of the Kruger National Park as far as the Sabie river; south of the Crocodile river in eastern Transvaal between the Kruger National Park, Swaziland and the Mocambique border and south of Swaziland in the Pongola river valley. The districts included in the above area are Rustenburg, Waterberg,



Potgietersrust, Pietersburg, Soutpansberg, Letaba, Pilgrim's Rest, Nelspruit, Barberton, Piet Retief, Pretoria, Warmbaths, Bronkhorstspuit, Groblersdal and Lydenburg, and in these they occur in anything from small numbers to very large herds, according to the degree of development of the district. Kettlitz estimates the number of impala in the Transvaal as about 100,000.

Kettlitz and Verschuur (1958): about 500 in the Hans Merensky Nature Reserve.

Meester (1960): a few hundred in the Loskop Dam Nature Reserve.

Pienaar (1963): widely distributed throughout the southern and central parts of the Kruger National Park and in the north where permanent water and favourable habitat exists; the number of impala in the Park is estimated at 180,000 or more, with 60,000 in the southern, 85,000 in the central and 35,000 in the northern district.

Hirst (1964): the Timbavati Private Nature Reserve.

De Graaff (in litt.): approximately 132,500 in the Kruger National Park according to the March 1969 figures.

#### Mocambique:

Ellerman et al. (1953): parts of Mocambique.

Fajardo (1953): Gorongosa National Park.

Spence (1963): widely distributed throughout in suitable localities.

Gray (1964): most parts of Mocambique.

#### Rhodesia:

Fraser (1958): large herds in the lowveld and big concentrations in the southern and northern parts of Rhodesia.

Child and Savory (1964): distributed roughly through the mopane woodland but absent from areas of well-developed Brachystegia in the northeast and Baikiaea woodland on the Kalahari sand of the northwest.

#### Botswana:

Ellerman et al. (1953): the southern part of Botswana along the northwestern Limpopo to the

Rhodesian border and to Ngamiland in the north.

Hill (1942): Matapa pan, Kwaai and the Mababe Flats.

Kay (1962): large numbers on the Mababe Flats.

Van Eyssen (1964): Lake Ngami vicinity.

Kirsten (1966): the Moremi Game Reserve.

Tinley (1966): abundant in the Moremi Game Reserve.

Child (1968): a patchy distribution in northeastern Botswana, closely associated with that of the mopane veld; four more or less discreet populations distinguished, ie. along the Chobe isolated from all others in Botswana; the Okavango-Linyanti-Mababe population; one along the Botletle river and the last in the central area north of Nyai Pan and along the stock route towards Ngwezumba.

Winchester-Gould (1968): common in the Okavango region of Ngamiland.

Smithers (1968): widely distributed in the northern part of the territory as far south as Tsau in the west, Lake Dow at the southwestern corner of the Makarikari pan; throughout the eastern sector from the Tati concession south to Debeeti and west to Matapa pan; absent from the remainder of the central and southwestern Kalahari.

#### South West Africa:

Ellerman et al. (1953): the Okavango district; the Caprivi; in the Kaokoveld to the Cunene.

Bigalke (1958): occurs locally and not very plentiful along the Okavango river; the Caprivi and Ovamboland.

Gaerdes (1965): near the Okavango river and in the Caprivi.

#### Change in distribution:

The impala has disappeared from the most southern parts of its range in the northern Cape Province, ie. from as far south as Khosis, and only occurs in the northwestern Transvaal in the Marico, Brits and Rustenburg districts. In the rest of the Transvaal its distribution still coincides with that in the past but it occurs in smaller numbers and more locally in certain districts.



From Zululand along the east coast to Mocambique, the Transvaal lowveld, Rhodesia, northern Botswana, the Caprivi and northern South West Africa its range is also roughly the same as in the past.

In southern and central South West Africa, however, it has disappeared. Where the impala used to occur near the Omatako mountain and along the Omaruru and Nossob rivers, according to Andersson (1856 and 1881), it is now extinct.

Impala occur outside their original range where the species has been introduced into Game Reserves and private farms, for example the Willem Pretorius Game Reserve in the Orange Free State and certain farms in the Cape, Natal and Transvaal.